

ADULTS WHO DELIBERATELY SET FIRES:
THE UTILITY OF FIRE-SETTING INTERVENTION PROGRAMMES FOR
MENTALLY DISORDERED OFFENDERS

by

SIAN E. HUGHES

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ABSTRACT

This thesis explores both the utility and effectiveness of psychological interventions in addressing fire-setting behaviour amongst adults. Chapter one explores the heterogeneous nature of this population in terms of the behaviour, the personal characteristics, and the motivations. By outlining multi-factorial theories, it explores why adults intentionally set fires and the implications that this has on the development of psychological interventions. Chapter two provides a critical appraisal of the Millon Clinical Multiaxial Inventory (3rd Edition) as an assessment of personality disorder and psychopathology. This chapter explores the psychometric properties of the tool, both in terms of the reliability and validity of its use amongst adults within forensic settings. This was deemed important given its typical use with mentally disordered offenders, including those with a history of fire-setting behaviour. Chapter three contains a systematic review exploring the effectiveness of psychological interventions for adults who set fires, and highlights the shortage of available research. Although interventions have evidenced some promising findings in relation to recidivism and improved psychological well-being, limitations were recognised in relation to the quality of articles reviewed, and the generalisability of such findings. Chapter four explores the experiences of service users within a structured fire-setting treatment programme specifically designed for mentally disordered offenders. Using an Integrative Phenomenological Approach, insight is gained into the service users' perceptions of the programme and its utility in addressing fire-setting behaviour. Six themes are identified and discussed in length offering a rich understanding into the most salient aspects of the intervention from an inpatient service user's perspective. Finally, theoretical and clinical implications of the findings from the previous chapters are discussed in Chapter five.

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DEDICATION

To my husband and my parents - for everything you have ever done and continue to do for me. Thank you for the encouragement, support, and your unwavering belief in my abilities. This is dedicated to you. I love you, and I hope that this will make you proud!

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CHAPTER ONE:
INTRODUCTION TO THE THESIS

Arson offences have significant implications for society both in terms of risk to others and financial consequences. This is particularly concerning given the prevalence of arson. Between 2009 and 2010 alone, 32,579 arson offences were recorded by police in England and Wales (Home Office, 2010). Such offences not only result in injuries and arson related deaths (particularly for the 11% of these offences which were classified as ‘arson endangering life’), but have reported financial costs of in excess of £2.1 billion a year (Russell, Cosway, & McNicholas, 2005).

Definitions

‘Arson’ is a legal term (under the Criminal Damage Act, 1971) defining the criminal act of intentionally or recklessly setting of fires to property, and therefore, it has been argued that an ‘arsonist’, by definition, has to be convicted of the crime of arson (Dickens & Sugarman, 2012). This questions the utility of using the term with mentally disordered offenders who may not have been through the Criminal Justice System (CJS). Therefore, the term ‘fire-setter’ has been usefully described by Swaffer, Haggett, & Oxley (2001), as those who have intentionally committed acts of setting serious fires without necessarily resulting in contact with the CJS. Mentally disordered fire-setters are more likely to have contact with health and social services, although convicted arsonists may be transferred from prison to mental health facilities. Unfortunately, variations in the definition of this term remains evident

within the literature, as fire-setting is also used in the context of children below the age of criminal responsibility who deliberately set fires (e.g. Fineman, 1980).

Within mental health settings, 'Pyromania' is a further term which is used interchangeably with arson and fire-setting. Pyromania is frequently defined as the uncontrollable urge to set fires, which first appeared in the first edition of the DSM (DSM-I, American Psychiatric Association (APA), 1952) as an obsessive compulsive reaction, but was later featured under the category of 'Impulse Control Disorders Not Otherwise Specified' (DSM-III, APA, 1980), where it remains to-date. Pyromania was considered separate to arson due to the lack of apparent motive, and the experience of pleasure or tension reduction as a consequence of setting the fire. The current definition of Pyromania and the tight criteria within it, may exclude many deliberate fire-setters from the diagnosis (Dickens & Sugarman, 2012). For example, its inclusion under the category of 'Impulse Control Disorders Not Otherwise Specified' indicates that the individual has difficulties with impulsivity, which is a feature within other psychiatric disorders. Borderline Personality Disorder and Antisocial Personality Disorder are both defined, in part, by low levels of self-control (APA, 2000). However, the presence of these disorders would exclude fire-setters from a further diagnosis of Pyromania (as the presence of mental disorders and personality disorders are exclusion criteria for Pyromania). Equally, another difficulty in diagnosing Pyromania may be associated to the requirement for individuals to have set fires on 'multiple occasions' (APA, 2000: p. 669). As Pyromania does not require the fire-setting behaviour to meet the legal definition of arson, the fires set may be deemed 'small' and 'controllable', and therefore go undetected by professionals.

The reported rates of pyromania are reducing, and following a review of 90 repeat fire-setters, Lindberg, Holi, Tani, & Virkkunen (2005) reported that only three

met the diagnosis criteria for pyromania. Despite the low prevalence rates, the term continues to be used both in the media and by the lay person in describing an individual who sets multiple fires (e.g. as highlighted recently within a national newspaper in reference to a celebrity having ‘pyromaniac tendencies’ after setting fire to a dollar bill: Mendoza, 2012)

For the purpose of this thesis, the term fire-setter and fire-setting will be applied for all individuals with a psychiatric diagnosis, who have intentionally set fires, with or without a criminal charge of arson and with or without an apparent motive to set fires or fascination with fire-related stimuli.

The Association between Mental Disorder and Fire-setting Behaviour

Fire-setting has been found to be relatively common amongst mentally disordered patients (Geller, 1987) and has been linked to affective disorders such as Depression (Dell’Osso, Altamura, Allen, Marazetti, & Hollander, 2006), thought disorders including Schizophrenia (Anwar, Langstron, Grann, & Fazel, 2011) and personality disorders such as Anti-social Personality Disorder (Lowenstein, 2003). Arson is the third most frequent offence that mentally disordered offenders were convicted with or charged for (after violence against a person and burglary/robbery respectively) (Johnson & Taylor, 2002), and is reported to be the category of crime (along with homicide) that has the strongest association to mental illness (Anwar et al). A retrospective examination of 167 UK psychiatric arson referrals indicated repeat arson in nearly half the sample (49%) (Dickens et al., 2009). However, conviction rates may underestimate the prevalence of arson behaviour amongst mentally disordered offenders, as their mental health status may make them less likely to be tried and/or found guilty of an offence (Blackburn, 1996).

Recidivistic arson amongst mentally disordered offenders is of particular concern, not only in relation to the devastating consequences to society, but because mentally disordered fire-setters are frequently detained under the Mental Health Act (HMSO, 1983) within secure hospitals. Any recidivistic fire-setter within secure hospitals poses a significant risk to both care staff and other potentially vulnerable occupants. In 2007 alone, 489 fires occurred within UK psychiatric hospitals and required fire and rescue service attendance (Department for Communities and Local Government, 2009), which is disproportionately large in comparison with other hospital premises (Grice, 2012). It is not unreasonable to suspect that mentally disordered offenders with a previous history of fire-setting behaviour may, in part, contribute to this heightened risk in these settings.

Fire-setting has historically been viewed as secondary to the primary symptoms of a psychiatric disorder (see Barnett & Spitzer, 1994), and support for this view is found in a number of studies which demonstrate that fire-setters have a psychiatric diagnosis. For example, Repo, Virkkunen, Rawlings, and Linnoila's (1997) review of the literature suggested that between 40 and 60% of fire-setters have a diagnosis of personality disorder as well as a history of alcohol and substance misuse. Additionally, within developed 'typologies', 'mental disorder' or 'cognitive impairment' are regularly reported as 'types' of fire-setters (e.g. Geller, 1992 and Fineman, 1995, respectively).

However, such groupings offer no explanation as to why some adults with mental health difficulties may set a fire, whilst many others with these difficulties do not. Equally, it does not illicit whether the 'mental disorder' resulted in the fire as opposed to other factors, and often assumes that mentally disordered fire-setters have no other motive. This is clearly evidenced by the Washington State Department of

Social and Health Services (2007) who identified mental health concerns (namely, Depression and Schizophrenia) as a 'universally accepted motive for fire-setting' alongside other common motives (i.e. revenge, profit/economical gain, etc). This assumption is challenged through an example given by Kocsis, Irwin, Hayes, and Nunn (2000) who highlighted how a fire that was set at the failing business premises, of a man with a diagnosis of Schizophrenia, was more closely connected to the poor returns of the business than the mental disorder, suggesting the fire was motivated by profit.

Therefore, mentally disordered fire-setters, like non-mentally disordered arsonists are proposed to be a heterogeneous group, in that there are many reasons why they may set a fire. Understanding the function of fire-setting behaviour is essential in terms of the treatment of these individuals.

Understanding why Adults set Fires

One reason proposed for why people set fires, is that they do so because they have an abnormal fascination with fires and fire-related stimuli. This has been challenged by Jackson (1994) who argued that fascination with fire is universal, and that it tends to be over-reported amongst fire-setters, and under-reported amongst the general population. Jackson argues that if people set fire solely because of their fascination with fires, they would choose safer targets, and that since property is the most common form of uncontrolled fire-setting, this view does not provide an adequate explanation for why people intentionally set fires.

A further explanation of fire-setting that is infrequently adopted is the view that fire-setting is connected with sexual excitement (e.g. MacDonald, 1977). Consistently, research has associated masturbation with fire-setting (Grinstein, 1952)

and sexual gratification with ignition of fires (Kocsis & Cooksey, 2002). However, the largest empirical study of fire-setting indicated that only 3.5% of fire-setters reported sexual motives (Lewis & Yarnell, 1951), with more recent studies suggesting that between 0 and 8% of fire-setters are sexually motivated (Bradford, 1982; Hill, et al., 1982). Jackson (1994) questions whether the physiological arousal of fire-setting is confused with sexual arousal by the fire-setter, especially as 'excitement' is identified as a frequent motive for fire-setting behaviour.

More prevalent explanations of fire-setting include: setting fires to express anger (Harris & Rice, 1996); to communicate to others (e.g. Geller, 1992); to gain attention from others (e.g. Bradford, 1982); to seek revenge (e.g. Harris & Rice, 1984); or as a suicide attempt/gesture (e.g. Coid, Wilkins, & Coid, 1999). Such findings indicate that people set fires due to poor assertiveness skills, and Harris and Rice (1984) provided support for this through their findings which indicated that fire-setters were less assertive than other mentally disordered patients who had not set fires. The view that fire-setters were less assertive led to the suggestion that fire-setting is used as a way of redirecting aggression towards property (Jackson, Hope, & Glass, 1987). This belief was later challenged by Coid et al. who found that female fire-setters had more convictions for violence against others, than women without a fire-setting history. Importantly, 'unassertive' individuals made up only 28% of Harris and Rice's (1996) total sample, amounting to only one of four types of mentally disordered fire-setters, further highlighting the heterogeneity of this offender group

Although these explanations offer some insight into the various functions of fire-setting behaviour, Puri, Baxter, and Cordess (1995) stressed the importance of considering both the individual predisposing factors (i.e. mental health difficulties) and the precipitating factors (what may have triggered the offence) when formulating

why people set fires. The inclusion of these factors may elaborate on how an individual's deficits (e.g. assertiveness difficulties which may or may not be related to mental health difficulties or cognitive impairment) would require a situation which they desired or needed to change in order for fire-setting to occur. Equally, it would offer insight into fire-setting behaviour with the presence and the absence of active mental health difficulties.

Multi-factorial Theories of Fire-setting

Multi-factor theories represent comprehensive or multi-factorial accounts of offending, by including the core features of an offender group, outlining what contributes to causing these features, and by describing how this manifests in the offending behaviour. Unfortunately, there are very few multi-factorial theories for fire-setting behaviour, but those that have been developed offer useful explanations of fire-setting.

The earliest multi-factorial theory was Jackson's functional analysis theory (Jackson et al, 1987; Jackson, 1994), which proposes that fire-setting is a maladaptive response influenced by both complex antecedents (psychosocial disadvantage, dissatisfaction with life and oneself, social ineffectiveness, specific psychosocial stimuli, such as previous exposure to fire, and triggering stimuli), and positive and negative reinforcing contingencies (as highlighted in Figure 1). The inclusion of previously evidenced background characteristics of fire-setters within this model is an important contribution in understanding how fire-setting behaviour develops. These developmental characteristics reflect further heterogeneity amongst fire-setters (see Gannon & Pina, 2010 for a review), with some individuals having a family history of fire-setting (e.g. Rice & Harris, 1991), and/or poor childhood socialisation which may

have led to aggression, limited coping skills, and assertiveness difficulties (Vreeland & Levin, 1980).

Essentially, the model proposes that as a result of these antecedents an individual may find that they have few, if any, effective ways of influencing an undesirable situation. In the context of a 'triggering event' (a situation or environment that the individual wishes to change), the individual is suggested to experience increased frustration, which may consequentially resort to fire-setting behaviour. The short-term positive consequences of this behaviour (such as the positive changes to their environment, improved self-esteem and self-efficacy, and increased arousal) are proposed to increase the individuals' interest in fires, and therefore, reinforce the likelihood of future fire-setting. However, the long-term consequences of both fire-setting behaviour and the individuals intensified interest in fires include feelings of disappointment with self and life, perceived ineffectiveness, and feeling disadvantaged psychosocially. Therefore, fire-setting itself, further exacerbates the initial antecedents.

Jackson's theory also offers an understanding on how 'typical' childhood fire-play may evolve to adult fire-setting through similar short-term reinforcing contingencies (such as acceptance amongst peers and attention from caregivers). This offers an opportunity to formulate the development of fire-setting and the function of the behaviour for each individual, and to develop individualised treatment for individuals who set fires.

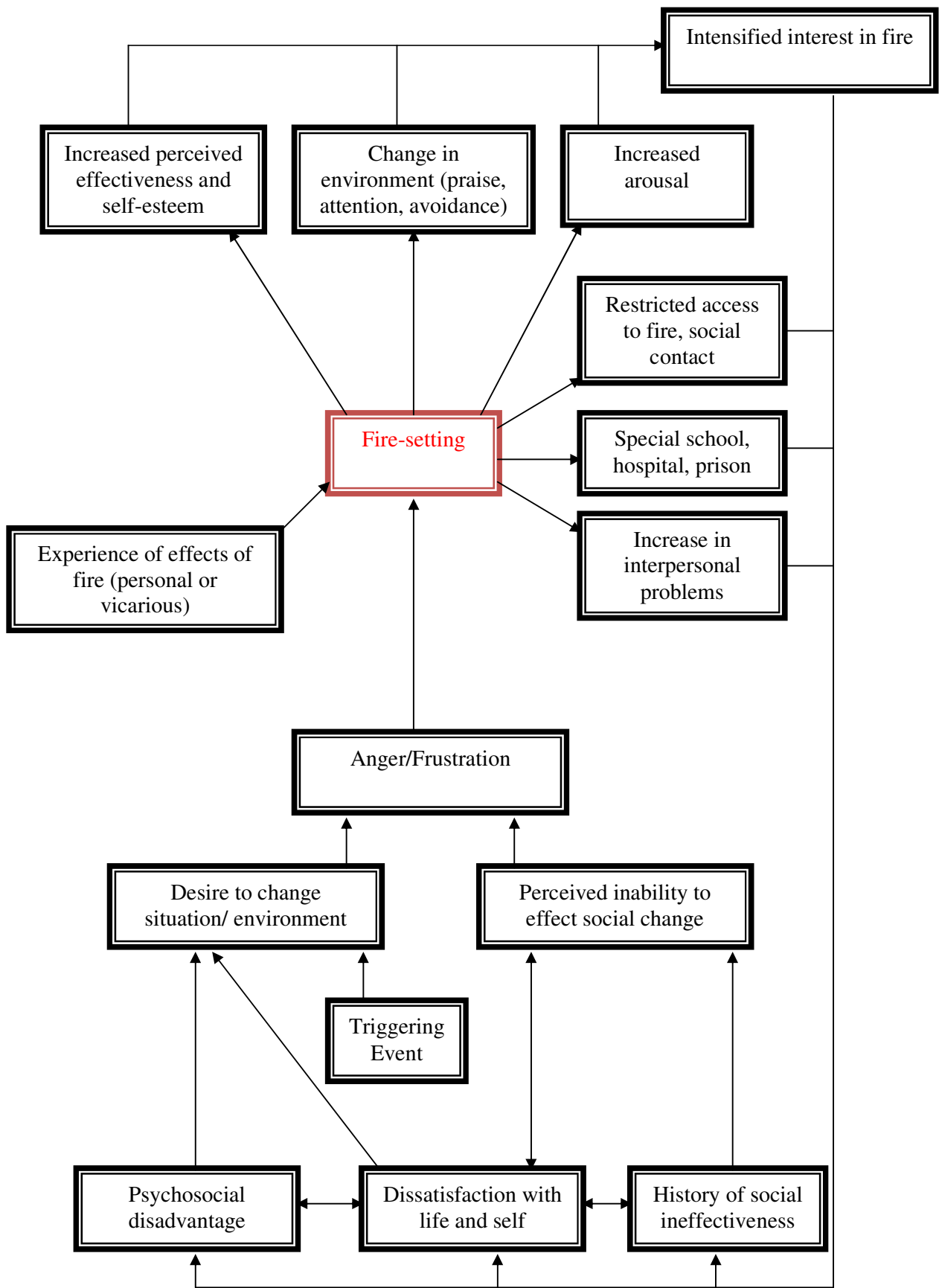


Figure 1: A Diagrammatic Formulation of Jackson's Model

Unfortunately, the theory fails to explain why people who are not psychosocially disadvantaged may set fires, or why many individuals who are psychosocially disadvantaged do not go on to set fires. Furthermore, Gannon and Pina (2010) argue that the theory lacks explanatory depth, in that it fails to explicitly describe how cognitive or individual personality factors lead to a predisposition to set fires.

Fineman's (1995) dynamic behaviour model, in contrast, highlights the importance of offence supportive cognitions in the role of fire-setting. Similar to Jackson, et al. (1987), Fineman stressed how historical factors (e.g. social disadvantage) predispose individuals to antisocial behaviour generally, and how reinforcement contingencies may encourage fire-setting. Fineman however, explores in more depth the contingencies prompting a specific fire-setting behaviour (including the cognitions and emotional experience before, during, and following the incident). This inclusion of cognitive factors represents an improvement on Jackson's model; however, Fineman fails to provide any clear description of cognitions which is essential for treatment needs (Doley, et al., 2011). Additionally, it has been argued that the model may more accurately explain juvenile fire-setting, as much of the empirical support for Fineman's dynamic behaviour model is related to this literature (Ó Ciardha & Gannon, 2012).

Positively, recent attempts to provide a clearer description of cognitions have been made by identifying implicit theories of fire-setting (Ó Ciardha & Gannon, 2012). The implicit theory of offending suggests that it is the belief system that allows an individual to interpret situations in a way that makes offending more likely (Ward, 2000). Ó Ciardha and Gannon identified five implicit schemas for fire-setting. Two of these are similar to the beliefs of other offender groups ('dangerous world' and

‘normalisation of violence’), whereas the other three are exclusive to fire-setters (‘fire as a powerful tool’, ‘fire is fascinating/exciting’, ‘fire is controllable’). Ó Ciardha and Gannon argue that the evidence for the exclusive fire-related cognitions is drawn from the literature which identifies that: fire-setting is used to gain attention (e.g. Bradford, 1982) and therefore perceived as powerful; the reinforcing contingencies of fire-setting may result in excitement, and pyromania is consistent with fire fascination; and individuals who set fires may lack an understanding of the dangerousness of fires or may believe that it can be controlled through their own early fire experimentation.

A recent attempt to develop a multi-factorial theory of fire-setting has been to utilise the Action System Model (ASM) of offending, and apply this to the Ward and Siegert’s (2002) pathway to sexual offending theory (Fritzon, 2012). The ASM highlights the behaviour and personal characteristics of the fire-setter and then relates these to non-criminal characteristics and behaviour. The aim is to identify whether the fire-setting behaviour derives from internal sources (e.g. emotional distress) or external sources (e.g. interpersonal conflict) and whether it affects an internal target (e.g. their own body) or external target (e.g. a persons’ property). Ward and Siegert’s model of sexual offending proposed four primary mechanisms by which sexual offending occurs. This is one of the main strengths of the pathways model as it recognises that individuals sexually offend for many different reasons, and may follow diverse aetiological pathways (Ward, Polaschek, & Beech, 2006). The adoption of this pathway model for fire-setting behaviour was recognised as beneficial by Fritzon in explaining the heterogeneity of fire-setters. Furthermore, Fritzon suggested that there is a pairing between the four original modes of Ward and Siegert’s model (i.e. intimacy deficits, deviant interest, self-regulatory problems, and

antisocial thinking) and Fritzon, et al.'s (2001) four fire-setting modes (i.e. conservative, expressive, integrative, and adaptive).

Similar to Jackson, et al.'s (1987) and Fineman's (1995) theories of fire-setting, Ward and Siegert's model of sexual offending highlights the importance of 'vulnerability' for offending (i.e. family environment, learning history, and cultural issues). However, they suggest that a number of aetiological pathways emerge from this base of vulnerability. By adopting this model and adapting it for fire-setting behaviour, Fritzon (2012) brings together a number of single theories into one comprehensive model (see Table 1).

The 'conservative mode' maps onto the 'intimacy pathway' of the model as it reflects the difficulties that fire-setters may experience in developing or, more commonly, maintaining relationships (Canter & Fritzon, 1998). Fires are reported to be set in the context of interpersonal conflict and therefore are triggered by an external source (i.e. the other person). The fire is set as a problem-solving strategy, and a way of improving the internal experiences (i.e. emotions) of the fire-setter.

The 'expressive mode' reflects the 'deviant interest pathway' of the Ward and Siegert model, and highlights an interest in fire and its properties (i.e. the fire service, crowds). Fires may be set as a form of emotional or sexual expression. The 'self-regulation pathway' of sexual offending describes the failure to develop appropriate self and emotional regulation to manage intense affect. Consistently, the 'integrative subtype' of fire-setters are reported to set fires whilst experiencing intense emotions (i.e. internal source) and the fires are often targeted at the fire-setter themselves, either their own property or their body (i.e. internal target).

Table 1: Connection between Fritzon, et al.'s ASM and Ward and Siegert's Pathways of Sexual offending Model

Pathways of Sexual Offending	Fire-setting Modes of Functioning	Empirical support for relevance to fire-setting	Potential treatment goals
Intimacy Deficits	Conservative <i>Actions have external source and internal target</i> (e.g. setting fire for personal revenge and redressing the individual's emotional well being)	Relationship difficulties (Canter & Fritzon, 1998) Under-assertive (Harris & Rice, 1979) Poor social skills (Swaffer, 1993) Revenge seeking (Harris & Rice, 1984)	Cognitive reappraisal and restructuring Understanding anger/arousal
Deviant Interest	Expressive <i>Actions have internal source and external target</i> (e.g. emotional trigger and communicative function)	Fixation with fire (Swaffer, 1993) Sexual properties (MacDonald, 1977)	Emotional expression and modification of environmental reinforcers
Self Regulation/ Control problems	Integrative <i>Actions and target are internal</i> (e.g. engage in suicidal fire-setting as a result of emotional distress)	Suicidal motives (e.g. Rässänen, Haliko, & Väisänen, 1995) Emotional release (Roe-Sepowitz & Hickle, 2011)	Emotional recognition and regulation
Antisocial Thinking Patterns	Adaptive <i>Actions and target are external</i> (e.g. crime concealment fires)	General antisocial attitudes (e.g. Kocsis & Cooksey, 2002)	Family and multi systemic therapies. Environmental crime prevention strategies

The final 'adaptive mode' of fire-setting, is related to the 'antisocial thinking patterns' within Ward and Siegert's model. This reflects those that are more likely to engage in general offending rather than specific sexual offending or fire-setting behaviour. It is described as adaptive as the fire-setter will set fires within the context of other illegal activities (i.e. external source), and may be an attempt to conceal a crime (i.e. external target).

All of the four subtypes of fire-setting are proposed to be relevant for individuals with mental disorder (Miller & Fritzon, 2007). The intention of the ASM was to account for the ecological and descriptive features of the fire-setting behaviour, and therefore Fritzon (2012) did not extend it to incorporate the developmental influences in the process of fire-setting (as Ward and Siegert's model of sexual offending does).

Positively, the Multi-trajectory theory of Adult Fire-setting (M-TTAF) (Gannon, Ó Ciardha, Doley, & Alleyne, 2012) does offer an understanding into the multiple factors that interact to result in psychological vulnerability to fire-setting behaviour (see Figure 2). These factors include: developmental factors; biological factors/temperament; cultural factors; social learning factors; and contextual factors. The resulting psychological vulnerabilities (e.g. inappropriate fire interest, offence supportive cognitions, emotional regulation difficulties, and communication problems) may predominate within different adult fire-setters, meaning that an individual may follow one of five prototypical trajectories to fire-setting. These trajectories include: antisocial cognitions (reflecting general criminality and the use of fire as a means to an end); grievance (indicating difficulties with self regulation, aggression, anger and hostility, resulting in fire being used as a form of revenge); fire interest (with thrill seeking, stress, and/or boredom being motivators); emotional

expressive/need for recognition (indicating communication difficulties; and multifaceted (i.e. a combination of general criminality, and fire specific interest). There is some overlap between these trajectories and Fritzon's (2012) adaptation of the pathways to offending model.

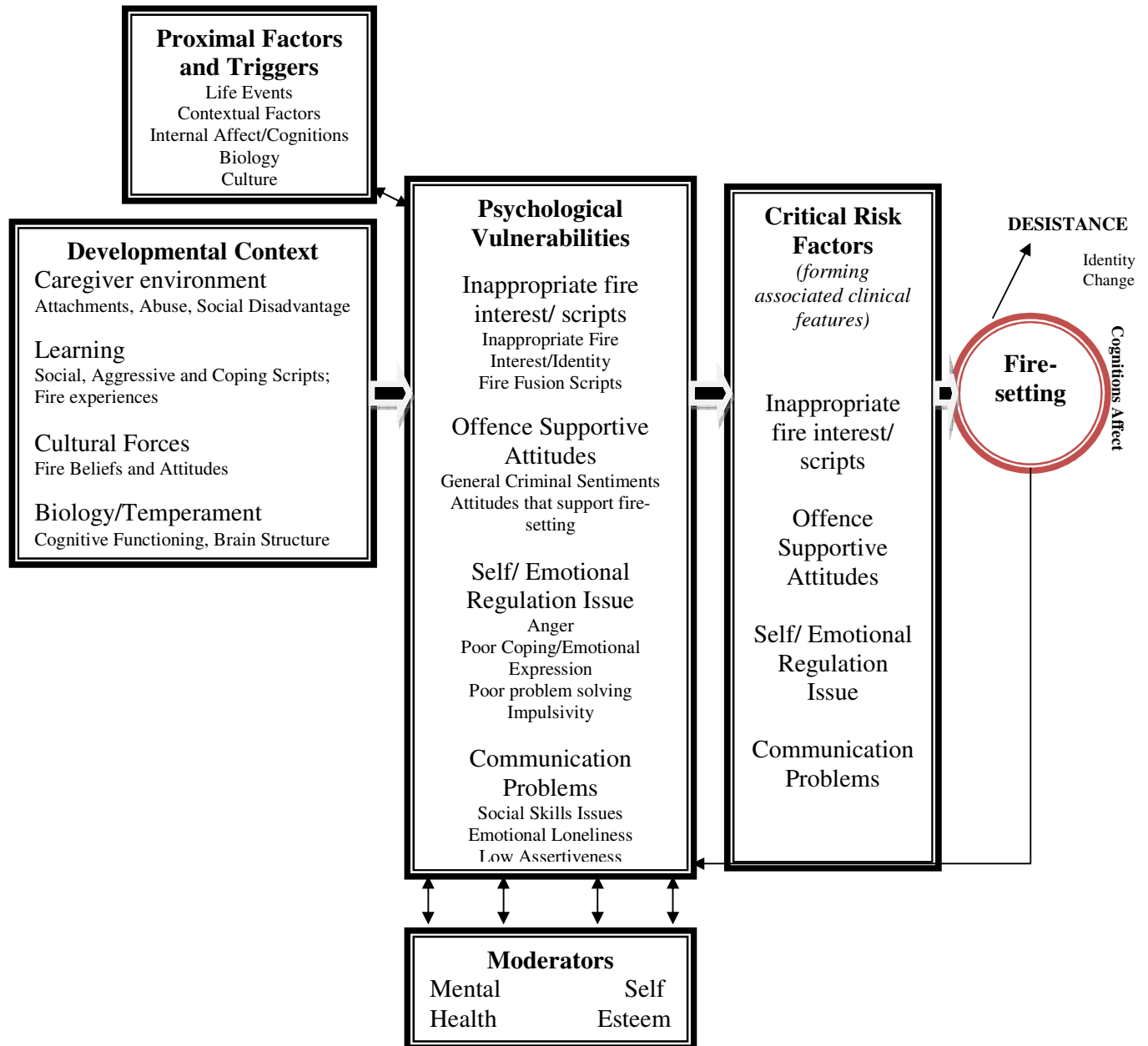


Figure 2. A Summary of the M-TTAF

Furthermore, this model also offers some explanation into the role of mental health difficulties amongst fire-setters. Within the M-TTAF, mental health is viewed as one of two moderators which determine how the proximal trigger will expose and interact with psychological vulnerabilities to produce the critical risk factors that may result in fire-setting. Furthermore, mental health may not only moderate triggers and vulnerabilities, but could, in itself, be a critical risk factor in some cases (i.e. command hallucinations).

Consistent with Jackson et al.'s (1987) and Fineman's (1995) model, the M-TTAF suggests that reinforcement plays a crucial role in fire-setting behaviour, but encouragingly, it offers additional understanding into how fire-setters may also desist from fire-setting (through cognitive transformations).

These recent developments in our understanding of why people intentionally set fires have demonstrated the multifaceted and complex nature of fire-setting. The identification of both the psychological vulnerabilities and risk factors that precede fire-setting behaviour, and our understanding of the contingencies that maintain the behaviour, is likely to inform the development of any treatment interventions that aim to address fire-setting.

Implications for Fire-setting Invention

Due to the various reasons (or pathways) for fire-setting behaviour, it has been proposed that it is not possible to develop a fire-setting treatment programme to target all fire-setters. For example, Fritzon (2012) suggests that persons operating in the integrative mode may benefit from emotional awareness and regulation work whereas those in the conservative mode may benefit from violent offender programmes which involve cognitive reappraisal and restructuring techniques (see Table 1). Similarly,

Häkkinen, Pulokka, and Santtila (2004) recommended that treatment is planned in relation to the characteristics of the fire-setting act. As this varies amongst fire-setters, they proposed that different offenders would benefit from very different treatment programmes (for example, different programmes for fire-setters with expressive acts versus those with instrumental acts), although these different treatments were not defined.

This is consistent with the principle of responsivity when working with offenders (Andrews & Bonta, 2003), as therapeutic needs are likely to differ and topographical similarity (in fire-setting behaviour) does not imply functional similarity. Different functions or pathways may, as suggested previously, require different therapeutic interventions. Alternatively, fire-setters may benefit from a modular intervention programme containing the necessary elements (e.g. Gannon, 2010), similar to that adopted for other offender groups (i.e. Sexual Offender Treatment Programme: SOTP).

Aim of Thesis

This thesis aims to explore the utility of psychological interventions with mentally disordered offenders who set fires. There is a dearth of research in relation to fire-setting amongst adults both within Criminal Justice System (CJS) and mental health settings. This thesis strives to contribute to the literature by providing further detailed information about treatment of fire-setting behaviour, and to offer practical recommendations in relation to the development of treatment interventions for these individuals.

The overall objective is to inform professionals involved in the care of, and decision making about mentally disordered fire-setters with an evidence base with

the intention of enhancing the services provided to adults with a history of fire-setting behaviours. The thesis consists of five chapters: Specifically, this introductory chapter has explored theories of adult fire-setting and the variation in terminologies applied to those who intentionally set fires. The association between mental disorders and personality disorders with fire-setting behaviour also has been discussed (e.g. Rice & Harris, 1991). Chapter two critically evaluates one psychometric measure that is utilised to gain detailed information about the personality and psychopathology of an individual. The Millon Multiaxial Clinical Inventory – 3rd Edition (MCMI-III, Millon, 1994; Millon, Davis, & Millon, 1997) is frequently used within clinical forensic settings (e.g. Piersma & Boes, 1997), and therefore, as an assessment tool, it may potentially contribute to individuals who deliberately set fires being dealt with by the Mental Health Act (HMSO, 1983) as opposed to the CJS. Furthermore, as mental health is proposed to be a factor in the aetiology of fire setting (as described by Gannon et al., 2012), these difficulties should be assessed prior to identifying treatment interventions for fire-setters. In the interest of ensuring that personality disorder and clinical syndromes are reliably assessed, this chapter provides an overview of this tool, in addition to a detailed discussion of the scientific properties of this instrument. It further explores the MCMI-III's applicability within different forensic settings and the importance of professionals being aware of the limitations of the instrument.

Chapter three provides a systematic review of the effectiveness of psychological interventions for adults who set fires. This chapter confirms that research in this area is limited, and that the quality of available research is compromised. This chapter concludes that there is a definite requirement for more research to be completed into the effectiveness of psychological interventions for

adults who set fire, and this research needs to be of a higher quality than the research conducted to date. Chapter four presents a qualitative research study examining the experiences of mentally disordered fire-setters within a structured fire-setting intervention programme. An exploration of the experience of fire-setters within a fire-setting intervention programme was chosen over an evaluation of the efficacy of the programme as:

- time and resource limitations prevented the development of a high quality quantitative study exploring treatment effectiveness (e.g. due to the limited number of participants and lack of a comparison group),
- the development of fire-setting intervention remains in its infancy, and a qualitative approach allowed for a more detailed perspective of a fire-setting intervention from the service user's view point, increasing our understanding of what may contribute to effective intervention in the future.

The thesis concludes with chapter five, which offers a discussion of the general findings of this thesis, and its implications for future research.

CHAPTER TWO:
CRITIQUE AND USE OF THE MILLON MULTIAXIAL CLINICAL
INVENTORY – 3RD EDITION (MCMI-III)

Introduction

As discussed in Chapter one, mental disorders and personality disorders have been associated with offending behaviours (e.g. Davison & Janca, 2011), and more specifically fire-setting behaviour amongst male (e.g. Rice & Harris, 1991) and female fire-setters (e.g. Coid et al. 1999). Personality disorder, in particular, has been identified as common amongst those who have set multiple fires (Dickens, et al. 2009). Furthermore, Chapter one describes how mental health difficulties play a role in the aetiology of fire-setting, both as a moderator and as a critical risk factor (as described in the Multi-trajectory Theory of Adult Fire-setting by Gannon, et al. 2012)

With this mind, mental health difficulties and personality disorder should be considered when formulating offences, identifying treatment interventions, and assessing future risk amongst fire-setters. Consequentially, psychologists frequently utilise psychometric instruments to gain detailed information about the personality and psychopathology of an individual.

Some personality instruments base their normative data on the ‘general’ population (e.g. Minnesota Multiphasic Personality Inventory – Second Edition (MMPI-II); Butcher, et al., 2001). However, when working with mentally disordered offenders, an assessment is required which has been developed for clinical populations as opposed to a non-clinical population. One such assessment, the Millon Clinical Multiaxial Inventory – III (MCMI-III; Millon, 1994; Millon, Davis, & Millon, 1997) is frequently used as an objective measure of personality and

psychopathology, rated as one of the three most frequently used personality assessments by practitioners conducting forensic evaluations (Archer, et al. 2006). Although such assessments are undoubtedly useful, tests that give misleading information are counterproductive. As assessments used within forensic settings may directly impact the individual (particularly if outcomes are presented in court), higher standards of accuracy are required, in comparison to clinical cases (Goodman-Delahunty, 1997). In America, this has been supported by the ‘Daubert Standards’ (‘Daubert’ v. ‘Merrell Dow Pharmaceuticals’, 1993) of scientific information, which includes within it, guidelines that pertain to psychometric testing. These standards have recently been used in the UK to assist the process of exploring the quality of report content in England and Wales (Ireland, 2012), including the appropriateness of psychometric measures.

Adults who intentionally set fires are likely to encounter the MCMI-III within various forensic settings, both for the purpose of diagnostic screening or clinical assessment, including: forensic inpatient settings (e.g. Piersma & Boes, 1997); outpatient clinics (e.g. Knabb & Vogt, 2011); prison settings (e.g. Wilson, 2004); child custody cases (e.g. Bow, Flens, & Gould, 2010); and forensic evaluation cases (e.g. Bow, et al., 2010). This review will examine the MCMI-III in terms of its scientific properties and its applicability within these forensic settings.

Overview of the Tool

Utility and Evolution of the MCMI-III.

The MCMI-III is designed to be used with individuals with problematic emotional and interpersonal symptoms that are undergoing professional evaluation. It is not designed for the normal population, physically ill individuals, or individuals

under the age of 18, with the Millon Index of Personality Styles Revised (MIP®; Millon, Weiss, & Millon, 2004); the Millon Behavioural Medicine Diagnostic (MBMD™; Millon, Antori, Millon, Meagher, & Grossman, 2001); and the Millon Adolescent Clinical Inventory (MACI™; Millon, Millon, & Davis, 1993) being the more suitable equivalents, respectively.

The assessment consists of 175 items rated true or false, and is estimated to take 20-30 minutes to complete. An obvious concern of any self reported measure is the potential inaccuracy in respondents' perception, insight, and presentation (Widiger & Samuel, 2005). This is especially the case for individuals with personality difficulties, as for example, it is argued that the perceptions of those characterised by grandiose self-image (e.g. Narcissistic Personality Disorder) should not be taken at face value (Kaye & Shea, 2000). The MCMI-III attempts to alleviate these concerns by adjusting scores based on these perceptions, and advising that the assessment is used within the context of wider clinical judgment and formulation.

Each successive version of the Millon Clinical Multiaxial Inventory (MCMI: Millon, 1983 and the Millon Clinical Multiaxial Inventory –II: MCMI-II; Millon, 1987) has been refined and adapted to incorporate theoretical and empirical developments. However, the MCMI-III is essentially a different measure from its predecessors, as more than half of the items (54.3%) are new, scales are less than half their previous length, and there are changes to how items are weighted (Rogers, Salekin, & Sewell, 1999). The MCMI-III also includes Grossman Facet Scales (Millon et al. 1997) which help identify the specific personality processes underlying the overall elevations on the personality scales. This maximises the therapeutic utility of the assessment by identifying and measuring specific problematic personality qualities.

Content and Scoring the MCMI-III.

The MCMI-III measures 14 personality patterns and ten clinical syndromes. Of the 14 personality patterns, ten are consistent with the Axis II personality disorder diagnoses within the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (American Psychiatric Association, 1994). The ten clinical syndromes are consistent with the Axis I scales in the DSM-IV. The scales are listed in Table 8. Despite the parallel between the MCMI-III and the DSM-IV, the International Classification of Mental and Behaviour Disorders (ICD-10) (World Health Organisation, 2008) is utilised as an alternative diagnostic manual within the United Kingdom. Although the ICD-10 is the official coding system, the DSM-IV appears to be popular amongst many mental health professionals (Andrews, Slade, & Peters, 1999). As highlighted in Table two, there is less consistency between the personality disorders within the MCMI-III and the ICD-10. Despite this, the MCMI-III continues to be utilised frequently as a tool to assess psychopathology in the UK.

In addition to the personality disorder and clinical scales, the MCMI-III also has one validity index which is proposed to be responsive to “careless, confused, or random responding” (Millon, 1994. p. 128), and three further modifying indices, which are aimed at detecting response bias. These scales assess ‘Disclosure’ (willingness to disclose personal information), ‘Desirability’ (the desire to place self in a positive light), and ‘Debasement’ (the tendency to over report difficulties).

Table 2: The MCMI-III Scales and their Relationship to the DSM-IV and ICD-10

Groupings	Scales	Presence in the DSM-IV	Presence in the ICD-10
Clinical Personality Patterns	Schizoid	√	√
	Avoidant	√	√
	Depressive	X	X
	Dependent	√	√
	Histrionic	√	√
	Narcissistic	√	X
	Antisocial	√	X
	Sadistic (Aggressive)	X	X
	Compulsive	√	X
	Negativistic (Passive Aggressive)	X	X
	Masochistic (Self defeating)	X	X
Severe Personality Pathology	Schizotypal	√	X
	Borderline	√	X
	Paranoid	√	√
Clinical Syndromes	Anxiety	√	√
	Somatoform	√	√
	Bipolar: Manic	√	√
	Dysthymia	√	√
	Alcohol Dependence	√	√
	Drug Dependence	√	√
	Post Traumatic Stress Disorder	√	√
Severe Clinical Syndromes	Thought Disorder	√	X
	Major Depression	√	√
	Delusional Disorder	√	√

The MCMI transforms the raw score into a base rate (BR) score. A BR is the prevalence of a characteristic within a certain population (Arkes, 1989). Transformations to BR scores are provided for each scale (range, 0 -115; median, 60), and a BR score of 75 indicates the presence of a personality trait, and a score of 85 or above suggests the presence of a personality disorder (Millon, 1994). Once converted to BR scores, four potential adjustments are required to arrive at the final BR scores. The first adjustment is based on the ‘Disclosure’ index, which increases the

personality and clinical syndrome scores if the respondent is considered reticent and secretive, or reduces the scores if they are over-disclosing. The second adjustment is based on the 'Anxiety' and 'Depression' indices, as if the client is experiencing acute or intense emotions at the time of completion (as indicated through high scores on these indices), other scores would also be distorted (Reich, Noyes, Coryell, & O'Gorman, 1986). Therefore, reductions are applied to the five personality scales most frequently affected by emotional distress: Avoidant; Depressive; Masochistic; Schizotypal; and Borderline. The third adjustment is related to the inpatient duration at the time of assessment, as recently hospitalised patients tend to deny the severity of their current emotional state (Millon, 1994). Consequentially, the adjustment increases scores on 'Thought Disorder', 'Major Depression', and 'Delusional Disorder' scales. The final adjustment is termed the 'Denial/Complaint Adjustment' which suggests that particular personality styles (Histrionic, Narcissistic, and Compulsive) are characteristically defensive, and so increases are made to all the personality BR scores.

Theoretical Underpinnings of the MCMI-III.

According to Loevinger (1957), to validate the development of a psychometric instrument, the tool should include theory formulation. Each version of the MCMI derived its content from an explicit theoretical framework based on Millon's own theory of personality disorder (Millon & Davis, 1996). This theory was initially based on principles of reinforcement (MCMI), but is now anchored within an evolutionary theory (MCMI-II; MCMI-III) that suggests that Personality Disorders derive from experiences that all individuals encounter which result in three polarities. The first polarity 'Pleasure vs. Pain' represents the struggle to exist or survive. The second

polarity 'Passive vs. Active' refers to the effort an individual makes to adapt to their environment or adapt the environment to meet their needs. Finally, 'Other vs. Self' makes reference to the strategies used to invest in others or in oneself. The positions and strengths of each polarity contribute to the individual differences in personality features and overall personality style. As a result, personality disorders manifest across all areas of personal functioning, and are expressed through several clinical domains; thus, personality types and clinical syndromes are related in a predictable manner. Inevitably, different scales share certain items of the MCMI-III, but the weighting of these items vary. The weighting system was developed by Millon (1994) but does not incorporate mathematical procedures. Therefore, the assessment may be biased towards the underlying theoretical structure within it.

Psychometric Properties

Kline (1986) stated that a 'good' test should possess certain characteristics including: interval or ratio data; reliability; validity; discrimination; and appropriate norms. When assessing the reliability and the validity of the MCMI-III, Millon (1997) claimed that studies conducted in the previous generations of the MCMI, offer support for this last version. However, there are disagreements to the extent that the first two editions are comparable to the MCMI-III, with some researchers proposing that the differences are sufficient that it should be considered a separate instrument (e.g. Rogers, Salekin, & Sewell, 1999). Therefore, research data from the previous editions are excluded from this critique.

Reliability.

A psychometric tool that measures a construct accurately, consistently, and with minimal error may be deemed as reliable. All psychometric assessments have some level of error, and Cronbach's alpha (Cronbach, 1951) is utilised as a preferred coefficient in measuring the reliability of a tool. A minimum of 0.7 is required for a test to be deemed to have 'adequate' reliability (Nunnally, 1978).

Internal Reliability.

Internal reliability indicates whether the different items within the psychometric assessment measure the same characteristic. Within the MCMI-III, each construct has a number of items grouped to form the respective scales. A high alpha coefficient indicates that a scales' items are highly correlated and behaving consistently (i.e. that the items belong together).

Although Millon (1994; 1997) reported that 20 of the 26 scales exceeded alpha coefficients of .80 (with Major Depression reaching a coefficient of .90), one scale was below the recommended minimum coefficient (Compulsive = .66) suggesting that the MCMI-III may not be a reliable measure of this trait. Nevertheless, the majority of the scales had adequate internal consistency coefficients, which indicates an overall reliability of the measure (Dyer & McCann, 2000). Further research by Blais, et al. (2003) supported this, by reporting adequate reliability of the anxiety and avoidant personality scale in the MCMI-III (.78 and .89 respectively). Blais et al. suggested that the removal of item 124 would further increase the coefficient alpha of the anxiety scale to .81.

In conclusion, Beutler and Groth-Marnat (2003) argue that the reliability coefficients of the MCMI-III were amongst the highest of all psychometric personality assessments.

Test-Retest Reliability.

A further measure of reliability is whether a test is able to achieve similar results when participants are re-tested at a different point in time (Shuttleworth, 2009). Correlation coefficients between these two sets of responses are often used to measure the test re-test reliability of a measure (Webb, Shavelson, & Haertel, 2006). If a test fails to yield a similar score given no intervention, there would be low coefficients, and therefore concerns about the reliability of the measure. A minimum coefficient of .70 should be used as Guilford (1956) notes that below this the standard error becomes so large that interpretation of the scores is dubious.

Millon (1997) reports a median stability correlation of .91 over an interval of five to 14 days (with the Somatoform scale achieving the highest correlation of .96 and Debasement achieving the lowest of .84). This suggests that the MCMI-III results are highly stable over short periods. Similarly, Craig and Olsen (1998) reported that the test re-test reliability of the anxiety scale was .81.

Stability over longer durations (six months) was evaluated by Craig (1999) who concluded that there was a lower median reliability of .78 for the personality scales, and .80 for the clinical syndrome scales. This reduced to .73 for the personality scales, and .59 for the clinical scales over a four year time scale (Lenzenwegers, 1999), suggesting that the re-test reliability of clinical scales reduces over time. This may reflect the transitory characteristics of the clinical scales in comparison to the enduring nature of personality scales.

Validity.

Test validity is defined as an estimate of how well the test measures what it is supposed to measure (Goodwin & Leech, 2003). The literature describes several types of validity and several methods for estimating validity.

One of the biggest challenges to the validity of the MCMI-III is the utility of BR scores. Millon (1997) provided a general overview of the development of the BR scores, which indicated that rates were adjusted subjectively towards the rates reported in unidentified 'epidemiological studies'. The lack of raw data and the incomplete description of the BR transformation is a key problem in assessing the validity of the test (Grove & Vrieze, 2009). Furthermore, the use of epidemiological rates may not fit with the general aims of the MCMI-III, as any adjustments made to clinical sample rates based on general population rates is inconsistent with developing the tool to be used in clinical populations and not general populations.

The manual also fails to provide a rationale for the different BR transformations based on gender, or any information about which scales are most frequently elevated amongst males and females (in comparison to the Personality Assessment Inventory: PAI; Morey, 1991). This unjustified gender difference is particularly concerning when the MCMI-III is utilised in child custody cases where Histrionic, Narcissistic, and Compulsive personality disorder scales are often elevated (e.g. Halon, 2001; McCann et al., 2001). For each of these scales, the raw score results in higher BR scores for females. For example, using the Histrionic scale, a raw score of 22 would transform to a BR score of 88 for a female. This falls above the personality disorder cut-off score of 85. However, the same raw score would transform to a BR score of only 73 for a male, which is below the cut-off score for

personality traits (of 75). This gender difference is unsupported by personality disorder prevalence rates within the Great Britain (e.g. Coid, Yang, Tyrer, Roberts, & Ullrich, 2006) and there is no reported gender difference within the DSM-IV (APA, 1994) for this disorder. Similarly, despite compulsive personality disorder being identified by some as significantly more frequent in males (Mattia & Zimmerman, 2001), a further gender bias towards females is evident. This bias questions the validity of the gender adjustment within the BR scores, particularly as other tests may manifest less inequality in the gender comparisons. For example, the PAI has no gender differences in the raw to standard score transformations (Morey, 1991).

Face Validity.

A test is said to have face validity if it appears to test what it is supposed to test. On the face of it, the MCMI-III has good validity (Robson, 2002). The instrument is designed to assess personality disorders and clinical syndromes and has a strong theoretical underpinning. Additionally, the MCMI-III has included validity scales that may alert the clinician to response sets, biases, and distortions which might compromise the validity of the instrument.

However, these alone do not determine how valid an instrument is and further statistical validity is required to confirm whether the MCMI-III actually measures personality disorder and clinical syndromes, in the way that it claims.

Concurrent Validity.

If a psychometric tool correlates with a previously validated measure of the same construct, it is proposed to have concurrent validity (William, 2006). Attempts have been made to correlate the MCMI-III with already established and accepted

measures of the same constructs. Millon, et al. (1997) required their participants to complete a range of additional tests to establish concurrent validity. The highest correlations were evident amongst the Beck Depression Inventory (BDI; Beck & Steer, 1987) and Major Depression scale (.74) and the Dysthymia scale (.71).

Blais, et al. (2003) evidenced further concurrent validity for the Anxiety and Avoidant personality scales, by comparing these to well known measures of anxiety and personality. The MCMI-III Anxiety scale demonstrated significant positive correlations with the Personality Diagnostic Questionnaire – Revised (PDQ-R; Hyler & Reider, 1987), Beck Anxiety Inventory (BAI; Beck & Steer, 1990), but not with the Hamilton Anxiety Scale (HAM-A; Hamilton, 1959). Similarly, the Avoidant Personality Disorder scales evidenced significant correlations with the PDQ-R and the BAI, but not with the HAM-A. Hesse, Guldager, and Lindeberg (2010) validated the clinical scales against a structured diagnostic interview (Mini International Neuropsychiatric Interview), the Montgomery-Asberg Depression Rating Scale (MADRS; Montgomery & Asberg, 1979), and the BAI. Consistently, the Anxiety scales of the MCMI-III had a high correlation with the BAI, and the Major Depression Scale also had good concurrent validity. The Thought Disorder and Delusional Disorder scales evidenced a moderate correlation.

To assess the concurrent validity of the personality scales, Millon (1997) used the MMPI-2 test but reported low correlations across the board. The highest correlation was between the MMPI-2 Hypochondriasis and the MCMI-III Somatoform (.63), and the MMPI-2 Depression and the MCMI-III Depressive (.59) and Avoidance (.56) personality scales. Rossi, Van den Brande, Tobac, Sloore, and Hauben (2003) found slightly higher correlation coefficients ranging from .56 and .75 between the MMPI-2 and the Dutch version of the MCMI-III. Nevertheless, some

scales were clearly below the acceptable level of .70, suggesting poor concurrent validity for the personality scales. Alternatively, these findings may be a reflection of the developmental and theoretical differences underpinning the two measures.

Predictive Validity.

If the score on one tool predicts the outcome of an intervention or a score on another measure, the tool is reported to have predictive validity (McIntire & Miller, 2005). Researchers have proposed that the MCMI-III can predict intervention outcomes, particularly in relation to drug abuse programmes. For example, Stark and Campbell (1988) reported a correlation between treatment drop-outs and low scores in Avoidant, Depressive, Histrionic, and Paranoid Personality Disorders, as well as Thought Disorder, Major Depression, and Delusional Disorders. Ball, Nich, Raunsavile, Eagan, and Carroll (2004) also found some subtypes of the MCMI-III to have better outcomes on non-incentive treatment programmes.

The ability of the MCMI-III to predict diagnoses has also been explored. The MCMI-III is closely aligned with the DSM-IV and the manual states that it is “strongest in the measurement of Axis II disorders” (Millon et al., 1997: p.68). therefore, the diagnostic validity is measured in terms of test operating characteristics, including: Prevalence (the probability that the person has the disorder that the test is measuring); Sensitivity (how sensitive the test is to the presence of a disorder); Specificity (to what degree does it detect a specific disorder and exclude other pathologies); Positive Predictive Power (PPP: probability of positive cases that do have the disorder); Negative Predictive Power (NPP: probability of negative cases that do not have the disorder); and Overall Diagnostic Power (global index of tests classification index), (Retzlaff, 1996).

Millon et al. (1997) compared the MCMI-III scores of 321 participants with diagnoses and reported the prevalence, sensitivity, specificity, and PPP. The data suggested that eleven of the fourteen personality disorders had PPP over .50 (indicating that the MCMI-III is more likely to predict a correct diagnosis than not). Scores above this rate are considered valid (Rogers et al. 1999). The personality disorders that scored below the threshold included: Depressive (.49); Negativistic (.39); and Masochistic (.30). Although negative predictive powers (NPP) were not provided within the manual, Retzlaff (2000) calculated this from the original data and suggested a higher threshold for this, due to the higher prevalence rates of patients *not* having a specific disorder. This was set at .90 and all the personality disorder scales scored equal to, or greater than .94 (i.e. it would be very unlikely that the MCMI-III would not predict a diagnosis that was present).

Unfortunately, the predictive validity of Axis I disorders was less promising. As presented by Retzlaff (1996), any prediction of positive findings for clinical disorders is likely be wrong four of the five times (i.e. PPP= .18; false positives = 82%). However, the MCMI-III did appear more effective at predicting negative findings (i.e. NPP=.93; false negatives = 7%).

Millon et al (1997) concluded that between 1994 and 1997 the “MCMI-III shows a modest but generally upward trend in the instrument’s sensitivity and positive predictive power” (p. 102). Using Cohen’s (1988) guidelines for the interpretation of effect size, Hsu (2002) concluded that the average effect size increased from above ‘medium’ in 1994, to nearly three times what Cohen defines as ‘large’ in 1997, supporting Millon, et al’s (1997) view of an upward trend. However, Retzlaff’s (1996) study obtained lower PPP’s with the MCMI-III than the MCMI-II, prompting concern that the MCMI-III has lost some diagnostic properties. It has been argued that Hsu’s

(2002) findings may be due to ‘confirmatory bias’ (Garb, 1998), whereby the clinicians who were asked to rate the patient may have selectively attended to patient information which would support the elevated MCMI-III scores, and thus support the hypothesised presence of a disorder. Equally, participating clinicians may have greater familiarity with their clients in the 1997 study (than in the earlier 1994 study), and/or developing greater clinical and theoretical knowledge regarding personality disorder.

Content Validity.

If a test measures a representational sample of all the characteristics of the domains being assessed it is suggested to have content validity (Anastasi & Urbina, 1997). Since the MCMI-III was developed to reflect the amendments of the DSM-IV (by including a further 95 items), it could be argued that content validity is fairly self evident. Dyer and McCann (2000) suggests that the manual provides a comprehensive and persuasive demonstration of content validity: Firstly, there is a description of the development of item pools and assignment of items based on expert judgment; secondly, the manual outlines the constructs used to write the items and reports that six of the eight clinicians independently agreed on the assignment of items to scales without being aware of the constructs that originally guided creation of each item; and finally, the MCMI-III manual outlines the specific items that parallel individual DSM-IV personality disorder criteria allowing direct comparisons. Dyer (1997) therefore concludes that the MCMI-III’s content validity is superior to other major personality assessments.

However, Roger et al. (1999) argued that content validity is not confirmed by these outward connections between content, but by whether the items ascertain the

domain being assessed. Furthermore, Anastasi and Urbina argue that content validity is misleading, as the characteristics of the domains are based on the researcher's theory, making it difficult to determine what is really being measured. Therefore, in theoretically driven tests like the MCMI-III, construct validity is proposed to be more relevant, as this assesses the extent the test measures a construct or trait theoretically defined.

Construct Validity.

Construct validity is the degree to which a scale measures or correlates with the theorised psychological construct that it claims to measure (William, 2006). Nunnally (1978) reported that construct validity could be seen as 'factorial validity' (p.111). Although factor analysis enables us to assess factorial validity and the extent scales are measuring the theoretical construct, it is difficult to measure the theoretical model underpinning the MCMI-III as none of the scales correspond to the fundamental constructs (i.e. there is no 'self-other', 'pleasure-pain' or 'active-passive' scales).

Therefore, the success of the MCMI-III depends primarily on its validity as a measure of the DSM-IV scales (Cuevas, Garcia, Aluja, & Garcia, 2008), and the theoretical constructs are those consistent with the DSM-IV. For example, depression is a construct within the MCMI-III that manifests itself in indicators within the DSM-IV, such as poor appetite. Construct validity should be evaluated in terms of convergent validity (is it similar to other operations that in theory it should be similar to) and discriminant validity (is it different to those that it should not be similar to, or evidence inter-correlations).

Rogers, et al. (1999) raised some serious concerns about the construct validity of the MCMI-III, and reported that to evidence construct validity, correlations for convergent validity should be at a greater magnitude than for discriminant validity. Following a meta-analysis of three studies (including Millon's (1994) original data), Rogers et al. found that convergent validity was in the low range for all scales (range: .07 to .31), with the majority of scales below the Fiske and Campbell (1992) guidelines of above .30. Additionally, 11 of the scales had higher discriminant correlations than convergent correlations. When discriminant validity correlations exceed the convergent validity coefficients, it is advised by Bagozzi and Yi (1991) that the proportion of these 'comparison violations' cases are computed. Should this exceed 33%, the construct validity is low (Bagozzi and Yi). Rogers et al. reported an unacceptable 62% comparison violation for Axis II scales.

Conversely, Saulsman (2010) evidenced construct validity for Dysthymia and Major Depression, and Avoidant Personality and Dependent Personality Disorder. Anxiety showed a moderate convergence with panic and worry related anxiety measures, but there was a problem discriminating it from depression. This is consistent with the tripartite model of anxiety and depression (Clark & Watson, 1991; Watson, 2000) which holds that depression and anxiety share common features and therefore high correlations between them will be a reflection of these shared features. Positively, a more detailed analysis using post hoc stepwise multiple regression analysis by Blais et al (2003) reported the core anxiety items of the MCMI-III are more specifically related to anxiety than depression.

Appropriate norms.

As the MCMI-III focuses on differential diagnosis of patients as opposed to determining the 'abnormal' from the 'normal' population, the norms were based within the clinical population (Millon, 1994). A substantial amount of normative data has been obtained, and although this represented gender equally (51% of the 998 subjects were female), a significant majority of the sample were Caucasian (86%). This raises concerns about the validity of the MCMI-III amongst clients from other ethnic groups. Furthermore, although the MCMI-III is proposed to be suitable for many settings, the majority of the normative sample was either outpatients or inpatients (78.3%), and only 4.6% of the original sample were within a 'correctional' setting. This raises concerns about its use within the prison system (e.g. Wilson, 2004), particularly as a screening tool for assessing psychopathology amongst inmates (Retzlaff, Stoner, and Kleinsasser, 2002) (as this could be indication of *false positive* errors). Of further concern, is the use of the MCMI-III in detecting potential aggressors in custody (Retzlaff, Stoner, & Kleinsasser, 2002) and to measure the behaviour aspect of psychopathy in prisons (Charles, 2003), given its limited norms on this population.

A further 8.3% of the normative sample was labelled as 'other', which is likely to include child custody cases as this is not listed elsewhere. Again, this questions the validity of the MCMI-III in such cases, as it is unclear whether there are appropriate norms for this population.

Will (1994) (as cited in Anastasi & Urbina, 1997) highlights this concern, stating that parents may be over-reported as pathological, increasing the potential for false positives. Although it clearly states within the MCMI-III manual that the assessment is not to be utilised with non-clinical individuals, its continued use

amongst forensic and clinical psychologists within child custody cases (e.g. Bow et al., 2010) is concerning.

Conclusions

The MCMI-III endeavours to provide objectivity, validity, and reliability to collateral information and clinical judgments (see Table three).

Table 3: Summary of the Reliability and Validity of the MCMI-III

Strengths	Weaknesses
High internal reliability suggesting that the different items within each scale measures the same characteristic.	Poor test validity due to BR transformations and potential gender bias within these.
High test- retest reliability suggesting that the test is able to achieve similar results when participants are re-tested at different points in time.	Potential Gender Bias
Good face validity as the test is designed to assess personality disorders and clinical syndromes and has a strong theoretical underpinning.	Poor concurrent validity for personality scales indicating that the tool does not consistently correlate with previously validated measures of personality disorders.
Good concurrent validity for clinical syndromes indicating that the tool correlates with previously validated measures of the same construct (i.e. anxiety and depression).	Poor predictive validity for clinical syndromes suggesting that the tool is less able to predict DSM-IV Axis 1 disorders.

Good predictive validity for personality disorder scales suggesting that the tool is able to predict DSM-IV personality disorder diagnoses.	Limited norms for ethnic groups and other forensic settings.
Appropriate norms for gender and inpatient/outpatients.	

There is considerable research to conclude that when used with appropriate populations (i.e. mental health settings) it can be a reliable measure that provides clinicians with important information regarding the presence of personality traits and clinical syndromes. Therefore, the MCMI-III may be a valuable tool when assessing mentally disordered fire-setters and formulating an understanding of the difficulties that may have contributed to the aetiology of fire-setting behaviour. The MCMI-III offers insight into the development of these difficulties (from an evolutionary perspective), and given the importance of anchoring formulation within a theoretical model that generates testable hypotheses, this is a strength of the instrument.

The MCMI-III is an inexpensive and quick measure of psychopathology, contributing to its wide use across forensic settings. The reliability of the assessment outcomes are enhanced when integrated with, and supported by, clinical judgment and other sources. However, in practice, the tool is not always used as part of a wider assessment. Bow, et al. (2010) found that 79% of psychologists continue to use computer generated reports for the MCMI-III, which provide outcomes in isolation. Additionally, these reports over-diagnose individuals, as they use a cut-off score of 60 (as opposed to 75). McCann (2002) therefore advises that computer generated reports are avoided in forensic practice.

Another concern about using the MCMI-III in isolation is that as a self-report measure, the respondent's answers to the questions may naively be taken as fact. Respondents may have limited insight into their emotional and interpersonal difficulties, or equally, in cases of psychological evaluation (such as criminal proceedings following incidents of fire-setting) may try to create a positive impression. Although the modifying indices of the MCMI-III go some way to minimise inaccuracy, collateral information should be gained.

The translation of the MCMI-III into different languages has widened its availability and therefore contributed to the literature in terms of the tool's reliability, validity, and general utility (as evidenced within this critique, e.g. Cuevas, et al. 1999). However, the value of these research contributions and the overall reliability of translated tools are questionable. Having equivalent sentences does not mean there is clinical equivalence (i.e. similar relevance to diagnosis) (Van de Vijver & Tanzer, 1997), and therefore, any interpretations of these tools should be viewed with caution.

A further limitation of the measure is the use of adaptive functioning items when assessing for the dysfunction or maladaptive functioning consistent with a personality disorder. For example, items assessing for confidence may identify a narcissistic person, and items assessing for conscientiousness identify the compulsive person. This results in the over-diagnosis of personality disorder in minimally dysfunctional populations (Boyle & Le Dean, 2000), such as child custody cases, where the elevated scales may be due to the custody litigation and not enduring personality characteristics (e.g. wanting to present as the 'best' parent).

Over diagnosis, or *false-positives* is likely to occur when used with individuals that it was not designed for, for which there is limited normative data. The MCMI-III is often used by psychologists to ensure appropriate standards are met within criminal

trials and child custody evaluations (e.g. Bow et al. 2010), and unfortunately the limited norms for these populations, would suggest that it is inappropriate to do so. Applying psychometrics to an unrelated population has been recently identified as an ongoing concern following the evaluation of expert witness psychological reports (Ireland, 2012). Therefore, it is suggested that the MCMI-III may not be reliable if used to assess fire-setters with no identified psychopathology, and that an alternative personality assessment may be more appropriate as this is based on normative data (e.g. MMPI-II: Butcher, et al., 2001). Future research could focus on enhancing the normative data in particular for forensic evaluation cases, and to include more diverse ethnic groups in order to increase the validity of the tool.

The fundamental concern of the MCMI-III is with the development of the BR scores. The validity of the BR scores, underpins the validity of the entire measure, and accounts for the gender bias inherent within the tool (Hynan, 2004). One direction of future research could be to review the BR scores. Grove and Vrieze (2009) propose a 'Bayes' score that does not adjust scores to general population rates, but would, in principle, use base-rate information from the clinician which would ideally be gleaned from relevant empirical studies. This in itself presents with its own limitations, particularly in relation to how to collect the appropriate local base-rate information to incorporate into the Bayes score.

Reviewing the MCMI-III has stressed the importance of remaining mindful of the appropriate uses of any psychometric assessment. Whether working as an expert witness or within mental health settings, psychologists must demonstrate their conclusions are validated and evidence-based (Doley & Watt, 2012). A psychometric assessment that identifies the mental health and personality difficulties of a mentally disordered fire-setter is likely to contribute considerably to the understanding of their

behaviour and in identifying appropriate treatment interventions. The MCMI-III is hypothesised as being beneficial in contributing towards the formulation and treatment design of fire-setters. However, the MCMI-III, like any other psychometric measure, is only valid for use within the population for which it was intended. Although it can provide rich insight into a respondent's perceptions, awareness, and presentations, the interpretation of the assessment must be limited to the research base on which it was evolved, and the theoretical model which underpins its development.

CHAPTER THREE:
A SYSTEMATIC REVIEW OF THE EFFECTIVENESS OF
PSYCHOLOGICAL INTERVENTIONS FOR ADULTS WHO
INTENTIONALLY SET FIRES

ABSTRACT

Background

Arson results in devastating consequences in terms of its risk to people, the damage it has on property, and the financial implications to society as a whole. Despite the recognition that adults are responsible for approximately 50% of these fires, the majority of research to date is aimed at understanding and treating child and juvenile fire-setters. The aim of this review is to explore the effectiveness of psychological interventions when working with adults with fire-setting behaviours.

Method

Searches were conducted using PsycINFO, Ovid Medline, and Embase according to specific inclusion and exclusion criteria. The search was not restricted to country or by date. Further searches were conducted by contacting experts in the field. Relevant journals were hand searched and references cited in identified articles were followed up. Data extraction and quality assessment was carried out in studies selected for full text appraisal, and results were analysed and presented in narrative format.

Results

Electronically, 884 possible titles and abstracts were found when limited to an adult population, with an additional 11 sourced from reference searches, and two suggested by experts. Fifty-nine full articles were critically appraised and 12 articles were selected for review; thus reflecting the dearth of published research in terms of

interventions for adults who deliberately set fires. A cognitive behavioural approach was the most frequently utilised group intervention, although overall the type of interventions included were varied. Early indications suggest improvements in terms of psychological functioning (anger, self-esteem, depression, and goal attainments), behavioural skills (relationship skills, social skills, and emotional expression), reorientation of sexual arousal away from fire-related stimuli, and short term cessation of fire-setting. Unfortunately, the quality of these articles limits the conclusions that can be drawn.

Conclusions

There is a great need for further high quality research into the effectiveness of interventions for adults who deliberately set fires.

INTRODUCTION

Despite the growing recognition of the effectiveness of offending behaviour programmes in reducing recidivism (Friendship, Falshaw, & Beech, 2001; McGuire, 2001), fire-setting remains a relatively unmet need within forensic psychology services. The majority of research is focused on interventions for young children and juveniles as these age groups are reported to be responsible for approximately 50% of deliberately set fires (e.g. Franklin, et al., 2002). However, this means that the remaining 50% of deliberately set fires are by adults. In support, research has shown that about half of those guilty or cautioned for arson are aged over 18 (Home Office, 2002), and yet research into this population remains limited. Most studies related to adult fire-setting are based on the characteristics of fire-setters, and theories of fire-setting. Very few studies have discussed the possibilities of intervention with adult fire-setters, and even fewer have assessed the clinical effectiveness of these interventions.

A study conducted for the Office of the Deputy Prime Minister in the UK (Palmer, Caulfield, & Hollin, 2005) provides a comprehensive review of the literature on interventions with arsonists and young children. Despite highlighting the range of interventions available for children and adolescents who set fires, it also concluded that the research into interventions with adults was sparse with limited information in terms of outcomes and effectiveness. Within this report, a critical review of interventions for adults was provided. This critical review examined the available interventions within eight specific UK organisations (two forensic mental health services, and six fire and rescue services) and assessed them using the Correctional Services Accreditation Panel (CSAP) devised by the Ministry of Justice. The CSAP

accreditation criteria consists of ten criteria (see Table 2) informed by research evidence related to ‘what works’ with offenders (Maguire, Grubin, Lösel, & Raynor, 2010). The CSAP also requires the programme to be fully manualised, and as such, sets a ‘gold standard’ which assesses interventions with aim to reduce offending behaviour.

Table 4. CSAP Criteria

Programmes should:
<ul style="list-style-type: none"> • Have a clear model of change underpinned by theory and empirical evidence • Have a clear criteria for selection of offenders • Target a range of dynamic risk factors • Use effective methods • Be skills orientated • Match dosage of programme to offender in terms of number and frequency of sessions, and be appropriately sequenced with respect to offender’s needs • Engage and motivate offenders • Be provided within a coherent sentence planning process, with continuity of programmes and services offered • Have procedures in place to ensure programme integrity is maintained • Have ongoing monitoring and evaluation with respect to targets for change and reoffending.

It was reported that no intervention met the stringent criteria set, particularly in terms of participant selection, the targeting of dynamic factors in intervention, use of effective methods, and dosage. As this review was restricted in terms of its stringent criteria (e.g. the need for manualised based treatments), and was restricted to the UK population, it was limited in the breadth of studies available. Currently, there is no systematic review which examines studies investigating the effectiveness of psychological intervention for adults with a history of fire-setting behaviour.

Aims and Objectives

The aim of this systematic review was to determine if psychological interventions are effective for adults who deliberately set fires. The objectives were:

- to identify the type of psychological interventions used when working with adults who set fires
- to determine if psychological interventions improve the psychological functioning of adults who set fires
- to determine if psychological interventions reduce recidivism in terms of fire-setting behaviour, and
- to determine if psychological interventions have an effect on psychosocial outcomes for adults (e.g. interpersonal skills, emotional regulation skills, improved communication).

In contrast to the previous review that was conducted for the Office of the Deputy Prime Minister (Palmer, Caulfield, & Hollin, 2005), which also attempted to explore the effectiveness of interventions for adult arsonists, this systematic review aimed to broaden the research to include any organisation or independent practitioner anywhere in the world, and did not restrict studies on the basis of quality.

Key Definitions

Fire-setting

As explained in Chapter one, fire-setting is often used synonymously with arson and pyromania. It is defined in this thesis as the deliberate setting of fires but does not require the individual to be charged or convicted of arson. Additionally, the term fire-setting can include people with a diagnosis of pyromania, but is not exclusive to these individuals.

Intervention

Throughout this review the terms ‘treatment’, ‘therapy’, and ‘intervention’ are used interchangeably. Unless otherwise noted, ‘intervention’ is defined as psychological intervention that can be provided within individual or group format.

METHOD

This report outlines the key findings generated from a systematic literature review on the effectiveness of treatment for adult fire-setters.

Literature Search Strategy

A review of the literature was performed in April 2010 and updated May 2012 by one researcher. An initial scoping exercise assessed the quantity of potentially relevant studies and confirmed no similar systematic review had been conducted. The search for relevant literature included print, electronic, published and unpublished materials found by contacting experts in this field, and reference lists of selected articles. The search was not restricted by year or to peer-reviewed English language publications.

Electronic Databases.

The library search strategy to identify relevant articles used the following electronic databases:

- PsycINFO (1806 to May Week 3, 2012)
- Embase Classic & Embase (1947 to 2012 Week 20)
- Ovid Medline (1946 to May Week 2, 2012)

These databases were chosen to encompass a wide range of disciplines particular to this topic, including biomedical, social, and behavioural sciences. The only restriction by year within these searches was the restriction imposed by the database itself. A search of these databases was conducted using the same general search strategy and keywords. The ‘fire-setting’ subject heading (MeSH) terms and keywords are referenced in Box.1. and were separated by the ‘OR’ Boolean operator.

Box. 1. Fire-setting Keywords

Fire sett*; Firesett*; Arson*;
Pyroman*; Fire-play*; Fire
raising

Box. 2. Intervention Keywords

Treatment*; Interven*;
Psycholog*; Group; Therap*;
Outcome*; Program*.

This combination of keywords used to elicit research related to ‘fire-setting’ was combined with those related to ‘intervention’ (as. Referenced in Box 2) with the ‘AND’ Boolean operator.

The intervention keywords were also separated by the ‘OR’ Boolean operator.

Reference Lists.

Reference lists of previously published papers on similar topics were screened for relevant articles.

Expert Contact

Three international experts were identified as prominent in adult fire-setting literature and were contacted for unpublished papers and published/unpublished circulated papers relevant to the research questions.

Study Selection

Studies were retrieved and reviewed by one researcher to determine whether they met the following inclusion criteria (Appendix A).

Population	Adults aged 18 or above (no upper age limit was applied)
Intervention	Exposure to psychological intervention including individual and/or group therapy (no duration applied)
Outcomes	Arson recidivism, behaviour change, and/or psychological functioning outcomes
Study Type	Any study design: no restrictions
Language	No restrictions imposed, however, the article must have been translated into English language.

Studies that met at least one of the following exclusion criteria were not considered eligible and were omitted from the next level of screening:

- Studies that focused on psychopharmacological treatment only
- Studies that did not differentiate fire-setters from other offenders in treatment outcomes
- Studies that were a narrative (descriptive) review of treatment but with no outcome measures
- Studies that focused on fire-setting amongst children and adolescents.

Quality Assessment

A Quality Assessment was used to establish the quality of the studies in this review and enable interpretation of the evidence. To assess the quality of the research studies, a checklist was adapted from the Critical Appraisal Skills Programme (CASP, 2000) and The Critical Review Form for Quantitative Studies (Law, et al., 1998). This adapted descriptive assessment tool was used as other assessment scales that score quality numerically (thus providing a quantitative estimate of quality) are not recommended (Fayler, 2006). The reliability of the descriptive assessment tool (Appendix B) was assessed using a pilot study. This pilot study involved an assessment of four of the included articles by the author and a second reviewer who was blind to the author's initial quality assessment findings. Following this pilot, adjustment to the guidance for using the assessment was made, and retesting confirmed increased reliability (from a mean percentage agreement of 75% to an agreement of 90%). Adjustment to the initial criteria was not required.

Data Extraction

Data was extracted from the studies using a developed form (Appendix C) which was used to enhance the information gained through the quality assessment.

For each study, the following information was extracted: Confirmation of study eligibility based on the inclusion/exclusion criteria, and Study Characteristics (including methodology of study and intervention implemented). The remaining information was available on the quality assessment form so replication was not required. If information on the study characteristics was unavailable within the selected article, contact was made with the author, where possible, in order to ascertain the required information.

RESULTS

The initial library search of electronic databases identified 1657 titles (Appendix D). When the search was limited to include only 'adults' (defined as age 18 upwards), the number reduced to 1254 titles. From these, duplicates were removed and relevant abstracts were located, retrieved, and screened against the inclusion and exclusion criteria. This screening method resulted in only 46 articles deemed eligible for further review. Full text articles were obtained to review eligibility further and only four of these met the inclusion and exclusion criteria.

Contact with experts provided two articles, both of which met the inclusion and exclusion criteria. One of these articles was an unpublished manuscript presented at the Nursing Praxis International Conference in Preston, whilst the other was a published article not previously identified through electronic searches. The screening of reference lists identified eleven articles that were considered relevant to the research question. As previous, relevant abstracts or book chapters were located, retrieved, and screened against the inclusion and exclusion criteria. Following this, six articles were excluded and full text articles were obtained to review the eligibility of the remaining five studies; all of which met the inclusion criteria.

In total, twelve studies met the required inclusion and exclusion criteria. One of these studies made direct reference to the findings outlined within an earlier study and was therefore excluded (Hall, Clayton, & Johnson 2005). Furthermore, two of the studies provided a more detailed analysis of sub-samples from a previous study. As the sub-samples offered further details into outcomes they were included in this review, with connections between studies noted. The remaining twelve studies were subjected to quality assessment. Figure 3 demonstrates a flow chart for the selection of studies for this systematic review.

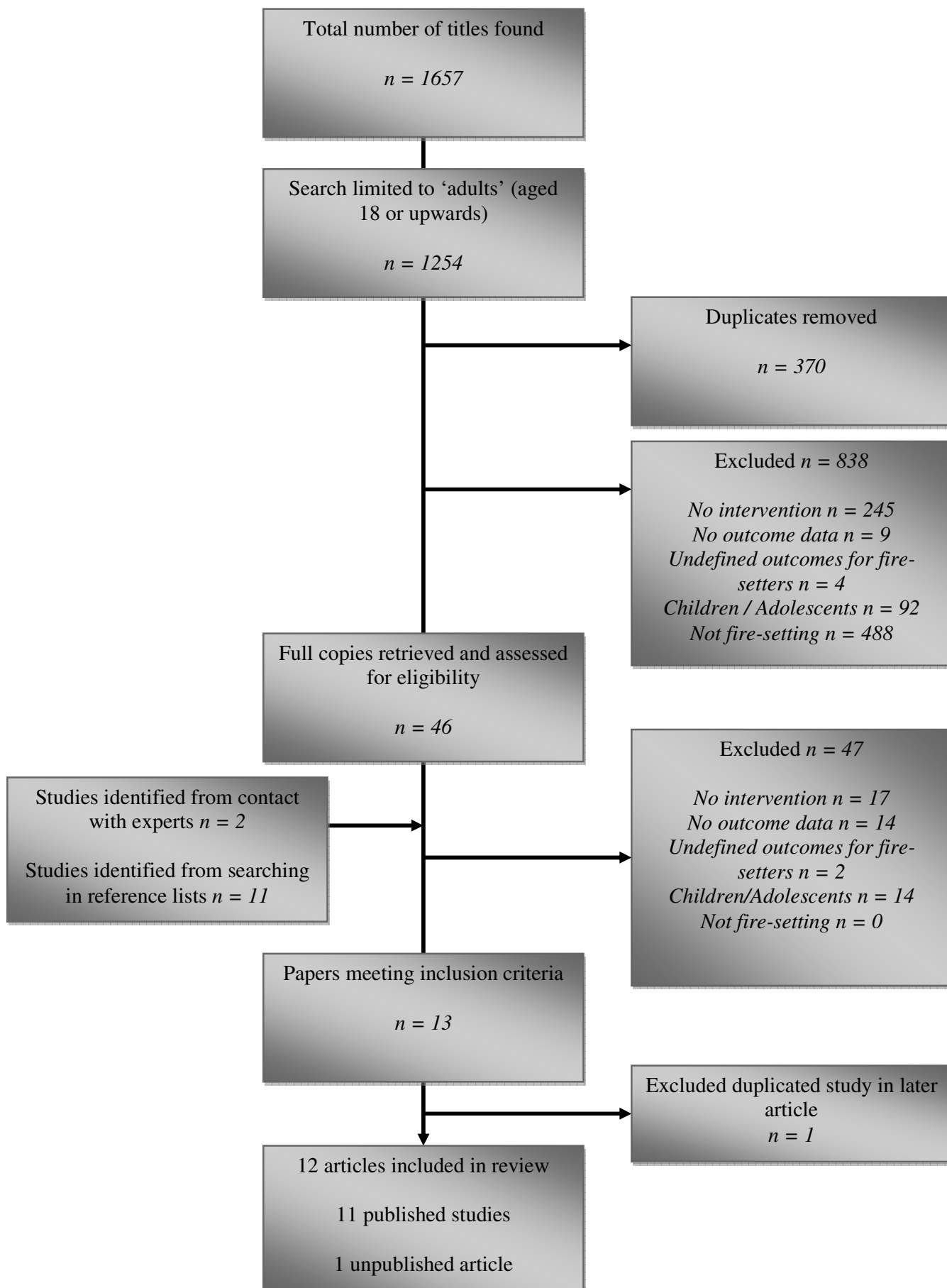


Figure 3: Flow Chart of Study Selection Process

Descriptive Data Synthesis

Table 3 provides a full descriptive account of all the studies included in this report. It should be noted that two papers (Taylor, Thorne, Belshaw, & Watson, 2006; Taylor, Thorne, & Slarkin, 2004) use a sub-sample from the original participant group of an earlier study (Taylor, Thorne, Robertson, & Avery, 2002). However, these papers provide a different account of the research (either by providing more detailed descriptions of the participants or by incorporating follow-up recidivism rates), and therefore they have been included within this review.

To not mislead the reader, it should be noted also that the inclusion of an unpublished study by Brown, Johnson, and Peedie (2000), was later described in *replication* by Hall, Clayton, and Johnson, (2005). However, the unpublished study is reviewed within this systematic review, in order to not confuse the reader when making reference to the latter authors who, within the same report presented an alternative treatment, which has also been reviewed within this systematic review. This has been made transparent within Table 3.

Characteristics of included studies: Gender, Age, Diagnosis

The total sample of the review comprised of 47 adult participants. Sixty-eight percent of these participants were male, 30% were female, and 2% did not provide information on gender in the article (representing a single case study participant reported by Royer, Flynn, & Oscada, 1971). Four of the studies consisted of participants with a diagnosis of learning disability alone, three studies had a sample of participants with a dual diagnosis of learning disability and psychiatric disorder, three studies evaluated treatment for adults with a sole psychiatric disorder (mental illness or personality disorder), and two papers consisted of single case studies with no identified psychiatric disorder or cognitive impairment.

The average age of the participants included in this review is outlined in Figure 4. Due to limited information it was not possible to calculate the mean age for all participants (Brown, Johnson, & Peedie, 2000) and in one study there was no information on the age range (Rice & Chaplin, 1979). Two case studies failed to provide any information in terms of the demographics of their participant (Delshadian, 2003; Royer et al, 1971).

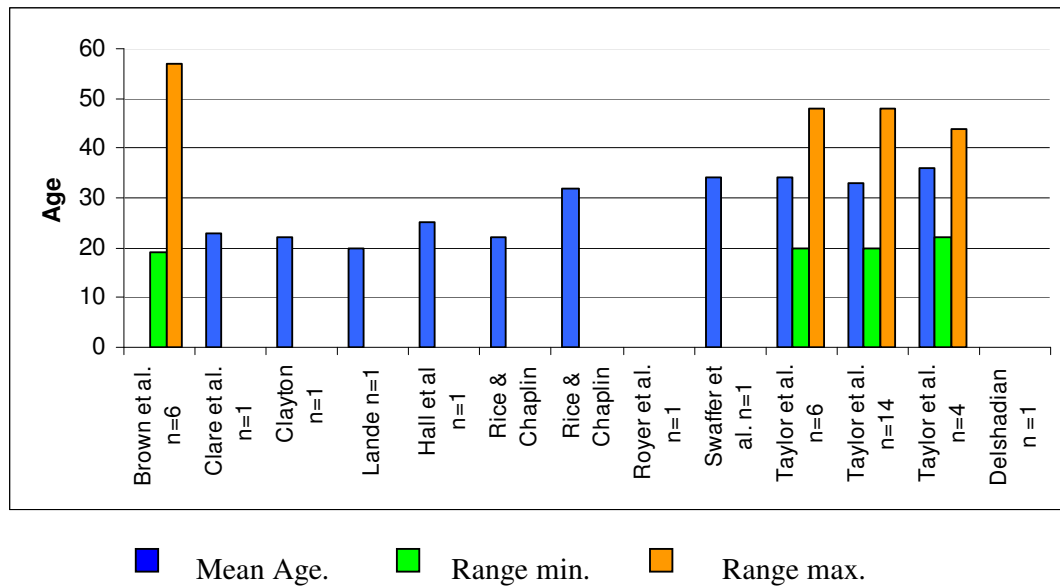


Figure 4: Mean Age of Participants across studies

With the data available in the included studies, the age range of participants is between 19 years old and 57 years old.

Table 5: Studies reporting the Effectiveness of Psychological Interventions for Adults with Fire-setting Behaviour

Authors, Year, Country	Participants	Study Design	Intervention	Outcome Measures	Findings	Strengths and Weaknesses
<p>Brown, Johnson, & Peedie (2000)</p> <p>UK</p> <p><i>And as later described in Hall, Clayton, & Johnson (2005)</i></p>	<p>6 male participants</p> <p>Age Range 19-57</p> <p>All mild to borderline LD (IQ scores not provided)</p> <p>History of fire-setting prior to hospitalisation</p> <p>Selection not reported</p>	Case Series	<p>Group Intervention adopting a Cognitive Behavioural Approach</p> <p>Duration: 16 weekly sessions. Each session lasting 90 minutes</p> <p>Content of sessions outlined in article</p>	<p>Self-reported visual tools:</p> <p><i>'Blame Cake'</i> And <i>'Risk Swamp'</i></p> <p>Tools validated with staff observations</p>	<p>In terms of blame: No change for 4 participants pre- and post-intervention; 1 participant reduced self-blame (from 80% to 65%) but increased blame towards friends; 1 participant shifted from blaming 'voices' to blaming self.</p> <p>In terms of risk: 1 participant increased in risk (deemed to be more realistic); 3 participants remained unchanged; 2 participants lowered their risk.</p>	<p><i>Strengths:</i> Insight into participant response of the sessions and their evaluation of the programme.</p> <p><i>Weaknesses:</i> Subjective reporting. No reliable or valid outcome assessments applied. No selection criteria. Limited demographics of participants.</p>
Clare, Murphy, Cox, & Chaplin	23 yr old inpatient	Single Case Study	Facial Surgery (13 operations)	Hay Rating Scale used on	Familiar staff judged face as sig. more attractive	<i>Strengths:</i> Detailed outline

<p>(1992) UK</p>	<p>Diagnosed with Psychopathic disorder and LD (FSIQ 65)</p> <p>Convicted of 2 offences of arson prior to hospitalisation</p> <p>Selection not reported</p>		<p>Assisted covert sensitisation (25 sessions)</p> <p>Graded Exposure for anxiety of 'matches' (3 months)</p> <p>Progressive muscle relaxation (group wkly)</p> <p>Social Skills (group wkly)</p> <p>Coping Skills and Assertiveness training (group wkly)</p>	<p>10 familiar staff and 10 unfamiliar staff</p> <p>Staff observations in terms of behaviour and psychological well-being</p> <p>Frequency of hoax calls</p> <p>Frequency of calls to 'Samaritans'</p>	<p>($p=0.0195$) following surgery but no sig. difference amongst unfamiliar staff (using Wilcoxon Signed rank test)</p> <p>Increase of coping skills without prompting</p> <p>Increased ability to discuss emotions</p> <p>Improved interpersonal skills</p> <p>Refusal to engage in muscle relaxation</p> <p>48 months post discharge to community home, there were 2 urges to make hoax calls, but no actual calls, and no calls to the Samaritans.</p> <p>No known incident of fire-setting.</p>	<p>of intervention.</p> <p>30 month follow-up period.</p> <p><i>Weaknesses:</i> No reliable pre- and post-measures in terms of psychological functioning and behavioural change. Non-blinding of observers suggest potential bias. Subjective ratings Unclear of the duration of some elements of treatment (i.e. social skills training, and coping skills training)</p>
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<p>Clayton (2000)</p> <p>UK</p>	<p>22 yr old Pakistan male (British born) with learning disability residing in a medium secure hospital.</p> <p>Antisocial behaviours and learning difficulties evident from age of 5.</p> <p>Diagnosed with epilepsy after a RTA at the age of 9.</p> <p>Self-injurious behaviour from age 12.</p> <p>First fire-set at the age of 8.</p>	<p>Single Case Study</p>	<p>Cognitive Analytic Therapy (CAT)</p> <p>16 Individual Sessions including reformulation letter, sequential diagrammatic reformulation, and goodbye letter</p> <p>Initial four sessions explored his perception of problems and understanding of offence.</p> <p>Post-treatment attended an Assertion Group which lasted 12 sessions. Each session was 2 hours in duration. (P. Clayton, personal communication, September 21, 2012).²</p>	<p>Authors' self-report</p> <p>Evaluation measures related to Assertion Group (details not provided) which was confirmed by staff reports from observations.</p> <p>Frequency counts of self-injurious behaviours, and physical attacks.</p>	<p>Following the CAT sessions, he was reported to have developed a clearer understanding of his offending behaviour, increased capacity to relate to others rather than self-injure, but continued low self-esteem.</p> <p>Following the Assertion Group the outcome measures suggested significant shift in thinking, as confirmed by hospital staff observations. Participant was described as more assertive and confident in communication.</p> <p>Self-injurious behaviour reduced to occasional veiled threats. Physical assaults and blaming others was reported to have declined. No</p>	<p><i>Strengths:</i> Detailed outline of CAT intervention Detailed case history of participant</p> <p><i>Weaknesses:</i> Outcome measures were not described and no insight into how frequency of behaviours was assessed. No statistical analysis of evaluation measures. No follow-up data.</p>
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¹ This information was not available within the article and was gained through direct contact with the author.

² This information was not available within the article and was gained through direct contact with the author.

	<p>Legal charges that precipitated his admission into adult secure care were arson with intent to endanger life and assault.</p> <p>The index offence included setting fire to his settee in his flat. There were other tenants in the building at the time (P. Clayton, personal communication, September 18, 2012).¹</p>				numerical information provided.	
Delshadian (2003)	Female prisoner (age unknown)	Single Case Study	2 years of Art Therapy (frequency of sessions	Subjective report of	Incidents of self-harming and fire-setting	<i>Weaknesses:</i> No outcome

UK	Imprisoned for 2 counts of arson: setting fire to beds in hostel. Selection not stated		not reported)	researcher/therapist No outcome measures identified	significantly reduced	measures reported or insight into how frequency of behaviours was assessed. Limited demographics.
Hall, Clayton, & Johnson (2005) UK	25 year old male Transferred from prison to medium secure unit due to suspected learning disability and significant self-harm. Full scale IQ was 72. Convicted with arson with	Single Case Study	Cognitive analytic therapy individual sessions 24 sessions overall (P. Clayton, personal communication, September 19, 2012). ³	Subjective report of researcher/therapist and ward staff. No outcome measures identified	A more positive attempt at problem-solving identified by staff post-treatment. Appeared to be relating to others in a more positive and complex manner.	<i>Weaknesses:</i> No outcome measures reported or insight into how conclusions were drawn

³ This information was not available within the article and was gained through direct contact with the author.

	<p>intent to endanger life after setting fire to garage of the family home.</p> <p>Therapy recommended following assessment. Participant consented to treatment.</p>					
<p>Lande (1980) USA</p>	<p>20 yr old Caucasian male</p> <p>Imprisoned for 2 incidents of fire-setting (both of which involved masturbation during incidents)</p> <p>Volunteered to engage in this treatment when</p>	<p>Single Case Study</p>	<p>4 x wkly sessions of orgasmic reconditioning (masturbating when viewing fire slides followed by female nude slides) Followed by 3 x wkly sessions of covert sensitisation (unpleasant scene described on viewing fire slides).</p>	<p>Verbal report of arousal using a Likert scale (0-4)</p> <p>Heart rate monitored</p> <p>Penile circumference changes monitored</p> <p>Recidivism rates at 4 and 9</p>	<p>Numerical information presented in graphs. No appropriate statistical analysis.</p> <p>Self reported arousal associated to fire slides decreased from pre-treatment and maintained at 9 month follow-up. Arousal to female slides increased through treatment and maintained at 4 and 9 month follow-up.</p>	<p><i>Strengths:</i> Range of pre- and post- outcome measures</p> <p><i>Weaknesses:</i> Reference in article to social skills training provided at 4 month follow-up. Unclear whether this may have impacted findings to the DV at 9</p>

	presented with range of therapy options			month follow-up	Heart rate reduced when shown fire slides post-treatment and at follow-ups. Heart rate increased when shown female slides post-treatment, but reverted to pre-treatment rate at 9 month follow-up. Penile circumference changes were greater to fire slides pre-treatment. Female slides showed greater response post-treatment.	month follow-up. No statistical analysis of data.
Rice & Chaplin (1979) Canada	10 inpatients divided into 2 groups based on particular characteristics: Group 1: 5 males with mean age of 22 with average to above average intelligence. All	Quasi-experiment with allocation of cases controlled and not random	Social Skills training group delivered twice wkly for 2 hours, for 4 weeks. 3 therapists provided both treatments. Group 1: treatment first Group 2: received control treatment first	Improvements were assessed through videotaped role-plays at pre-, mid-, and post-treatment. They were rated blind in a random sequence and	Group 1: sig increase in social skills post-treatment ($p < 0.05$) but no difference at mid- and post-treatment ($p > 0.10$) using ANOVA. Group 2: no difference pre- and mid-treatment ($p > 0.10$) but sig. difference pre- and post-treatment ($p < 0.05$) following social	<i>Strengths:</i> Use of blind rater. Comparison group. Appropriate use of statistical analysis. <i>Weaknesses:</i> Confounding variables due to

<p>diagnosed with personality disorder.</p> <p>Group 2: 5 males with mean age of 32 and mild to borderline LD. 3 diagnosed with Schizophrenia, 1 with LD only, and 1 with personality disorder.</p> <p>4 of the 10 participants sentenced for arson, 1 for manslaughter (related to arson), 2 deemed not guilty for reason of insanity on charge of arson, and 3 had set</p>		<p>(nondirective group psychotherapy: same frequency, duration, and therapists)</p> <p>On completion of initial treatment, participants were re-assessed before commencing second treatment.</p>	<p>were scored on the following items using a Likert scale (0-7):</p> <ol style="list-style-type: none"> Assertion Empathy Anxiety Verbal. <p>Male experimenter rated 20% of videos for reliability test</p> <p>Questionnaires given pre-, mid-, and post-treatment to assess knowledge of assertive responses.</p> <p>Recidivism rates of fire-setting.</p>	<p>skills training.</p> <p>Raters were identified as highly reliable using Pearson Product moment intercorrelation.</p> <p>In terms of questionnaires, there was no difference across time for either group ($p>0.10$)</p> <p>8 were released into the community. At 12 month follow-up there were no known fires.</p>	<p>slight variation in treatment content and due to the characteristics of the groups. Possible order effects recognised but study design not adjusted. Limited demographics of participants (i.e. no age range provided).</p>
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	fires but not convicted.					
Royer, Flynn, & Osgood (1971) USA	Inpatient with diagnosis of Schizophrenia Setting fires regularly on the ward	Single Case Study	Aversion therapy: Conditioning sessions split into 2 phases over 9 non-consecutive days. Phase 1: Electric Shock delivered to the palmer and dorsal surfaces of the hand when presented with cards with the words 'fire' or 'flame' and not when neutral words presented. Phase 2: 20 matches and tissues provided and participant required to set fire to the tissue. Shock delivered when flame touched the paper initially, and then when match was ignited from session 3.	Observations. Latencies of striking matches (in secs) Recidivism in hospital	No change observed in phase 1 of treatment Longer latencies noted over time prior to striking the match in phase 2. No fire-setting reported in the 4 year follow-up.	<i>Strengths:</i> Long term follow-up (although unclear whether in hospital settings). <i>Weaknesses:</i> Gender and Age undefined. Ethical issues regarding type of intervention.

			Booster sessions following fire-setting incidents on 6 occasions (3x Jan, 1x March, 1x May, 1x June)			
<p>Swaffer, Haggett, & Oxley (2001)</p> <p>UK</p>	<p>34 yr old female inpatient with conviction of arson.</p> <p>Diagnosed with Borderline Personality Disorder.</p> <p>History of fire-play as a child</p>	Single Case Study	<p>Group and individual therapy over 16 months. Mixed gender group.</p> <p>Group meets wkly for two hours.</p> <p>Individual sessions are monthly for 1.5 hours.</p> <p>Based upon Jackson (1987) model and cognitive behavioural framework.</p>	<p>Therapist observations.</p> <p>Functional assessment of fire-setting (Murphy & Clare, 1996)</p> <p>Culture Free Self-Esteem Inventory (Battle, 1992)</p> <p>Novaco Anger Scale (Novaco, 2003)</p>	<p>Therapist reports the development of assertiveness skills and an improvement in participant's ability to express emotions.</p> <p>Commitment to the group in terms of attendance.</p> <p>Participant at half-way point of treatment so no evaluation outcomes provided.</p>	<p><i>Strengths:</i> Detailed description of intervention would allow replication.</p> <p><i>Weaknesses:</i> Co-intervention (DBT) introducing confounding variables. Lacking formal mid-treatment evaluation data.</p>
<p>Taylor, Thorne, Robertson, & Avery (2002)</p>	14 inpatients with mild to borderline	Pre and Post Design	Multifaceted programme based on approach outlined by	Pre- and Post-assessments:	Paired t-tests used on all measures:	<p><i>Strengths:</i> Range of</p>

<p>UK</p>	<p>learning disabilities (IQ range 64-84).</p> <p>8 males, 6 females aged between 20-48 divided into 3 groups: 2x male groups (4 in each) 1 x female group</p> <p>All had history of fire-setting (overall 28 convictions for arson and 98 documented fires)</p>		<p>Jackson (1987, 1994).</p> <p>Adopting a cognitive behavioural framework.</p> <p>Group delivered by psychologist and nurse following a manual</p>	<p>Fire Interest Scale (FIS: Murphy & Clare, 1996)</p> <p>Fire Attitude Scale (FAS)</p> <p>Goal Attainment Scales (GAS)</p> <p>Novaco Anger Scale (NAS)</p> <p>Culture Free Self-Esteem Inventory – 2 (CFSEI-2)</p> <p>Beck Depression Inventory – Short Form (BDI: Beck & Beck, 1972)</p>	<p>In terms of the FIRS and FAS there was sig. improvements ($p<0.05$) 10 of 14 S's improved.</p> <p>In terms of the GAS, all scores improved but 3 scales improved significantly:</p> <ul style="list-style-type: none"> • Victim issues ($p<0.001$) • Understanding emotions ($p<0.05$) • Understanding of risk ($p<0.005$) <p>Total score increased for GAS at a sig level ($p<0.001$).</p> <p>In terms of anger, the total score sig. improved ($p<0.05$) but no subscales showed sig. change.</p> <p>Total self-esteem increased ($p<0.05$) as did general self-esteem and personal self-esteem ($p<0.05$)</p>	<p>outcome measures.</p> <p><i>Weaknesses:</i></p> <p>Lack of follow-up. Lack of comparison group. No comparison between genders. No ratings of actual behaviours (difficult as low frequency behaviour). Outcome measures with limited psychometric evaluation data.</p>
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					No sig. improvements on the BDI.	
<p>Taylor, Thorne, Belshaw, & Watson (2006)</p> <p>UK</p> <p><i>A sub-analysis of data used in Taylor, Thorne, Robertson, & Avery (2002) Study</i></p>	<p>6 female inpatients selected based on convictions for arson and their pre-assessment scores (anger, depression, and self-esteem)</p> <p>Mean age 34.4 yrs (range 20-48)</p> <p>Low to Borderline LD with mean IQ of 74 (range 64-82)</p>	Pre- and Post- Study	<p>Group based on Jackson (1987, 1994) model adopting a cognitive behavioural framework.</p> <p>Delivered over 40 sessions by a psychologist and a nurse</p>	<p>Pre- and Post-assessments:</p> <p>Fire Interest Rating Scale (FIRS)</p> <p>Fire Attitude Scale (FAS)</p> <p>Goal Attainment Scales (GAS)</p> <p>Novaco Anger Scale (NAS)</p> <p>Culture Free Self-esteem Inventory -2 (CFSEI-2)</p> <p>Beck Depression</p>	<p>Analysed using paired samples t-tests:</p> <p>In terms of the FIRS and FAS there were no sig. differences.</p> <p>The GAS total increased significantly ($p=0.023$)</p> <p>The NAS, CFSEI-2 and BDI changed in the expected direction although findings were not significant.</p> <p>4 of the 6 participants moved to the community, 1 moved to non-secure hospital, and 1 remained in forensic hospital. No further fires set by any.</p>	<p><i>Strengths:</i></p> <p>Thorough demographics on all participants. Use of outcome measures and follow-up to various settings.</p> <p><i>Weaknesses:</i></p> <p>Lack of comparison group and measures have limited reliability and validity.</p>

				Inventory (BDI)		
				2 yr follow-up recidivism		
<p>Taylor, Thorne, & Slarkin (2004)</p> <p>UK</p> <p><i>A sub-analysis of data used in Taylor, Thorne, Robertson, & Avery (2002) Study</i></p>	<p>4 male inpatients</p> <p>Case 1: 40 yrs old with diagnosis of Aspergers Syndrome and IQ of 71</p> <p>Case 2: 37 yrs old with diagnosis of psychopathic disorder and IQ of 68</p> <p>Case 3: 44 yrs old with IQ of 66</p> <p>Case 4: 22 yr old with IQ of</p>	Case Series	<p>Group therapy twice weekly for two hours.</p> <p>Based on the Jackson (1987, 1994) cognitive behavioural framework.</p> <p>31 sessions delivered over 4 months</p>	<p>Pre- and post-Assessments:</p> <p>Fire Interest Scale (FIS)</p> <p>Fire Attitude Scale (FAS)</p> <p>Goal Attainment Scales (GAS)</p> <p>Novaco Anger Scale (NAS)</p> <p>Culture Free Self-esteem Inventory – 2 (CFSEI-2)</p>	<p>No statistical analysis reported. Pre- and post-scores reported and narrative descriptions stating:</p> <p>FIRS – no sig change found although case 4 reduced indicating less interest in fire.</p> <p>FAS – no sig. change found although case 4 reduced indicating improved attitudes</p> <p>GAS – some changes found in terms of victim issues (Cases 1, 2, 3) emotional expression (Case 2), relationships (Case 3), understanding risk (Cases 2 & 3), and</p>	<p><i>Strengths:</i></p> <p>Detailed description of intervention making it possible to replicate. Detailed background on cases.</p> <p><i>Weaknesses:</i></p> <p>Reporting of statistical significance without providing data. Lack of transparency. Case 4 seemed to have an impact on overall treatment gains. Age of</p>

	<p>72.</p> <p>All have set fires resulting in detention under the MHA.</p>			<p>personal responsibility (Case 3).</p> <p>Anger fell by 1 SD for Case 1 into subclinical range, by ½ SD for Case 2 into subclinical range, by nearly 1 SD for Case 3 into clinical range, and by 3 ¼ SD for Case 4.</p> <p>Self-esteem remained unchanged for Case 1, but increased for Case 2 & 3. It reduced for Case 4.</p>	<p>participant was discussed as a factor, but no adjustment to analysis made.</p>
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Intervention Type.

The interventions outlined in the articles varied. Of the twelve studies included in this review, three studies (Taylor, et al., 2002; Taylor, et al., 2006; Taylor et al., 2004) evaluated a group intervention consistent with a cognitive behavioural framework developed by Jackson (1994)⁴. A further study reviewed a similar group intervention in combination with monthly therapy sessions (Swaffer, Haggett, & Oxley, 2001), and one study explored a comprehensive package of treatment including cognitive behavioural therapy (individual and group sessions) combined with facial surgery (Clare, Murphy, Cox, & Chaplin, 1992). Two studies explored individual cognitive analytic therapy sessions (Clayton, 2000; Hall, Clayton, & Johnson, 2005) with the former study incorporating an assertion group, and another study assessed the effectiveness of a social skills group (Rice & Chaplin, 1979). One study discussed art therapy as an approach when working with a person convicted of arson (Delshadian, 2003), one study assessed the effectiveness of aversion therapy (Royer et al., 1971), and the final study evaluated orgasmic reconditioning and covert sensitisation as a treatment for fire-setting (Lande, 1980).

Intervention Duration and Frequency.

As evidenced in Figure 5, the duration of intervention varied considerably and ranged between 4 weeks to 104 weeks (2 years). Intervention was typically delivered once a week (Brown et al, 2000; Lande, 1980; Royer et al., 1971) although on one occasion this weekly treatment was complimented with an individual session once per month in an alternative mode (Swaffer et al., 2003).

⁴ According to Jackson et al (1994) arson provides an effective means of influencing situations when other options are not possible, either because arsonists do not have the capabilities or the options are not considered viable to them. This underlies the basis of the philosophy of the intervention.

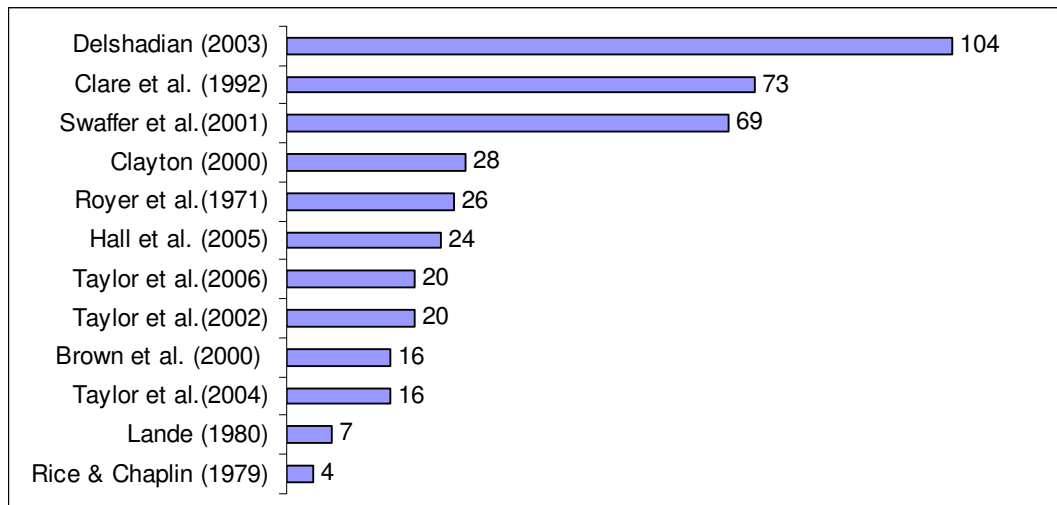


Figure 5: The Length of Intervention (in weeks)

Other interventions were delivered twice weekly (Rice & Chaplin, 1979; Taylor, et al, 2002, 2004, 2006). One study reported that the overall duration of intervention was divided into 16 weeks of cognitive analytic therapy, followed by 12 weeks of the second stage of treatment (assertion therapy) (Clayton, 2000). (Two studies reported the duration of treatment but failed to identify the frequency of interventions (Clare et al., 1992; Delshadian, 2003).

Study Design and Outcome Measures.

The methodological design of the studies incorporated into this review is outlined in Table 4.

Table 4. Methodological Design of Included Studies

Comparison Group	Pre and Post Design	Case Series	Case Study
<ul style="list-style-type: none"> • Rice & Chaplin (1979) 	<ul style="list-style-type: none"> • Taylor et al. (2002) • Taylor et al (2006) 	<ul style="list-style-type: none"> • Taylor et al. (2004) • Brown et al. (2000) 	<ul style="list-style-type: none"> • Clare et al. (1992) • Clayton (2000) • Delshadian (2003) • Hall et al (2005) • Lande (1980) • Royer et al. (1971) • Swaffer et al. (2001)

Outcomes were measured in varying ways within the study depending on the treatment provided and the type of study design. It was most common for authors' and/or participants' observations to be reported (50% of studies), or the frequency of recidivism was measured (five studies: 42%). Psychometric testing was used in three of the studies (25%) and the analysis of questionnaires and role-plays in two of the studies (16%). Less common was the recording of latencies which was utilised in one study (8%), as was the recording of physiological changes.

Quality of Included Studies.

All of the twelve studies included in this review were assessed in terms of their quality. As explained previously, a numerical reflection of the quality of the article is not advised, as although they offer simplicity there are concerns that the 'weighting' to different items in the scales are not empirically evidenced (Higgins &

Altman, 2008). Additionally, they can lack transparency in relation to which quality criterion each study achieves. For this reason, a descriptive account of the outcome of the quality assessments will be provided and summarised in Table 5.

The adapted quality assessment tool requires that in order for an article to be considered high quality it meets a number of the following criteria: (1) a sample representative of the population being assessed, recruited in an acceptable way and with sufficient information of demographic variables; (2) a comparison group/case; (3) the identification of confounding variables and relevant adjustments made for the effects of these variables in their design/analysis; (4) a detailed description of the intervention utilised; (5) outcome measures that are considered reliable and valid and blinding used when feasible; (6) an appropriate analysis of data reporting statistical significance of findings or clinical significance where possible; and (7) follow-up of outcomes for sufficient length and reporting of any drop outs. Where possible, information in relation to the study characteristics was gained from the author if identified as unavailable in the published article.

One study failed to fully meet any of the quality criteria (Delshadian, 2003), and only partly met two criteria: intervention and participants⁵. This questions the reliability and generalisability of the findings to other adults with fire-setting behaviour and indicates the need for further research into this intervention (art therapy).

⁵ It was not possible to contact this author directly to gain the required information, although attempts were made.

Table 5. Quality Assessment of Studies

	Brown et al.	Clare et al.	Clayton	Delshadian	Hall et al.	Lande	Rice & Chaplin	Royer et al.	Swaffer et al.	Taylor et al. (2002)	Taylor et al. (2004)	Taylor et al. (2006)
(1)Participants	X	√	√	<i>Partly</i>	√	√	<i>Partly</i>	X	√	√	<i>Partly</i>	√
(2)Comparisons	X	X	X	X	X	X	√	X	X	X	X	X
(3)Confounding Variables	X	X	X	X	X	<i>Partly</i>	<i>Partly</i>	X	X	X	<i>Partly</i>	<i>Partly</i>
(4)Intervention Described	√	<i>Partly</i>	√	<i>Partly</i>	√	√	√	√	√	√	√	√
(5)Valid Measures	X	X	X	X	X	√	√	√	X	<i>Partly</i>	<i>Partly</i>	<i>Partly</i>
(6)Appropriate Analysis	N/A	<i>Partly</i>	X	X	X	X	√	X	X	√	X	√
(7)Follow-up of Outcomes	X	√	X	X	X	√	√	√	X	X	X	√

Five studies failed to meet the required quality standard for the majority of the criteria (Brown, et al., 2000; Clayton, 2000; Hall, et al., 2005; Swaffer et al., 2001; Royer et al., 1971). Brown et al (2000) failed to identify how the participants were recruited into the intervention programme and failed to provide sufficient demographic information on these participants⁶. There was no comparison group and the study failed to identify any confounding variables. This study did not provide any outcomes using reliable or valid measures, but adopted self-reported measures and confirmed the results using the subjective perceptions/views of the author. Due to the nature of the measures, it was not possible to apply any statistical analysis or report clinical significance. There was no further follow-up to confirm whether treatment impacted on future fire-setting behaviour. Clayton (2000) also failed to describe outcome measures and no statistical analysis was applied to the reported reduction in incidents of self-harm and aggression. Similarly, Hall et al. (2005) and Swaffer et al. (2003) reported subjective outcomes and post-treatment evaluation data was lacking, with no further follow-up. Royer et al. (1971) failed to meet four of the required criteria, suggesting poor quality due to limited background information about the case study, the lack of a control case, no identification of confounding variables, and no appropriate analysis of the data gained through latencies measured.⁷ However, this study did report the longest follow-up period of four years.

Two studies failed to meet three of the seven criteria (Clare et al., 1992; Taylor et al., 2004): Both studies lacked a comparison control. Clare et al. failed to take consideration of confounding variables and no valid outcome measures were used. Additionally, this study only partly met the criteria for description of intervention (failing to describe the duration of elements of the comprehensive package), and for using an appropriate analysis (as a statistical analysis

⁶ It was not possible to gain this information directly from the author, although attempts were made.

⁷ It was not possible to contact this author directly to gain the required information.

was only used to assess the outcome of one element of the treatment package). Attempts were made to access details in relation to the duration of elements of the intervention, but this information was not available (I. Clare, personal communication, September 17, 2012). Taylor et al. (2004) failed to provide an appropriate statistical analysis of the pre- and post- measures, and did not provide a follow-up on the study. This study only partly met the criteria in terms of participants (no reference to the selection of cases was made), confounding variables (although variables were identified no adjustment to analysis was made), and related to the validity of the measures used.

Two studies failed to meet two of the criteria. This included the study by Lande (1980), who lacked a control case and did not conduct a statistical analysis, and the study by Taylor et al. (2002), who failed to provide both a control group and follow-up data. This latter study partly met the criteria for valid measurement tools due to the use of outcome measures with limited psychometric evaluation data available. One study failed on only one criterion: a lack of a comparison group (Taylor et al., 2006). The only study in this review that utilised a comparison group was Rice and Chaplin (1979) which either fully achieved or partly achieved all of the quality assessment criteria, indicating that this article had the highest quality overall. Unfortunately, this paper did not provide sufficient demographic information about the participants and failed to adjust for the effects of all confounding variables in their design⁸.

Overall the papers that met the most of the quality criteria are listed in descending order: Rice and Chaplin (1979); Taylor et al., (2006); Lande (1980); Taylor et al., (2002); Taylor et al. (2004); Clare et al. (1992); Royer et al. (1971); Clayton, 2000; Hall et al, 2005; Swaffer et al. (2003); and Brown et al (2000). As this systematic review is not limited by the quality of

⁸ It was not possible to contact this author directly to gain the required information.

included studies, the one study which failed to fully meet any of the quality criteria (Delshadian, 2003) was included within the descriptive data synthesis and overall findings of this chapter.

Descriptive Data Synthesis

The objective of data synthesis is to summarise and organise the outcomes of all the identified studies on fire-setting interventions for adults, through a narrative account. A study by Brown et al. (2000) investigated the implementation of a cognitive behavioural approach for adult males with learning disabilities. The authors found that participants of the group were more likely to self-report lower risk for fire-setting post-treatment or a more realistic perception of their risk if it did increase following intervention. A small number of participants reported different perceptions in the part they, or others, played in their fire-setting behaviour following the group, with one person taking more responsibility and one person taking less responsibility for their fire-setting.

Three studies also evaluated a cognitive behavioural group intervention (based on a multifaceted programme outlined by Jackson (1994) for recidivistic arson) with males (males and females) diagnosed with learning disabilities. The latter two studies (Taylor et al. 2004; 2006) provided more detailed analysis of the original study (Taylor et al. 2002) by selecting a gender specific sub-sample from the original larger participant sample. Therefore, they utilised the same outcome assessments to measure fire interest, fire assessment, anger, goal attainment, self-esteem, and depression (with one exception in that Taylor et al. (2004) did not provide outcomes on depressive symptomology). As expected, they evidenced similar findings. Taylor et al. (2006) and Taylor et al. (2002) using a paired samples t-test evidenced significant improvements in terms of the Goal Attainment Scale (Kiresuk & Sherman, 1968) total score

($p < 0.05$ and $p < 0.001$ respectively). Taylor et al. (2002) reported a significant change in terms of fire interest and attitudes following intervention ($p < 0.05$), significant improvements in terms of total anger using the Novaco Anger scale (Novaco, 1994) ($p < 0.05$), and a significant increase in terms of self-esteem using the Culture Free Self-esteem Inventory (Battle, 1995) ($p < 0.05$). There was no significant difference in terms of depression when assessed using the Beck Depression Inventory- Short Form (Beck & Beck, 1972).

Taylor et al. (2006) evidenced consistent findings in terms of anger and self-esteem but the scores were not within the significant range (however, group means did change in the expected direction). Therefore, this lack of significant findings may have been associated with the small sample size. Taylor et al. (2004) did not report significance (either statistical or clinical significance) for any findings, but the analysis of pre- and post- outcomes indicated that goal attainment either remained the same or improved, and anger scores reduced for all participants following treatment. Half of the participants reported increased self-esteem whilst the other half reported reduced self-esteem, and there was no noticeable change in the fire interest or fire attitude scores for any participants. Recidivism follow-up was only reported by Taylor et al (2006) who indicated no further fire-setting behaviours two years post-treatment.

A further study utilised a cognitive behavioural approach for a male with a learning disability (Clare et al. 1992), however, this study offered a more comprehensive package of treatment, including facial surgery and assisted covert sensitisation. The rationale for facial surgery was that the appearance of his disfigurement contributed to social isolation and was therefore a key factor in terms of his fire-setting behaviour. Outcomes of treatment effectiveness were divided into those evaluating the effects of facial surgery, and the authors' perception of improvements (or lack of) in terms of psychological functioning and behaviours. As predicted by

the authors, people who knew the participant judged his face as significantly more attractive post operation ($p=0.0195$), however in contrast to predictions, there was no significant difference found in independent (unfamiliar) raters. The authors' report that the covert sensitisation was 'meaningful' to the participant, that there was improvement to his emotional expression with staff, that hoax calls to the Samaritans had ceased, interpersonal skills had improved, part-time employment was gained, but that the participant was reluctant to attend the weekly progressive muscle relaxation group and eventually refused to take part or engage in this coping strategy (unfortunately, it did not state at what stage he disengaged from this group). There was no evidence of hoax calls (despite reporting at least three urges to do this) during the 30 month follow-up post-discharge. Whilst experiencing urges to set fires during the follow-up period, a covert sensitisation tape was effectively used as one of his coping strategies. Additionally, no calls to the Samaritans were made during the follow-up and the participant continued to discuss his difficulties with the care staff.

Cognitive Analytic Therapy (CAT) was used in two studies for learning disabled males residing within a medium secure hospital (Clayton, 2000; Hall et al., 2005). Clayton described how CAT was delivered on an individual basis over sixteen sessions and examples of the reformulation letter, sequential diagrammatic reformulation, and goodbye letter offered the reader some detail on the content of these sessions. The author made reference to the participant developing an increased understanding of offending behaviour and increased capacity to relate to others. However, it was identified that the participant continued to present with low self-esteem post-treatment. Following CAT therapy, the participant engaged in an Assertion Group which lasted for 12 sessions. Reference was made to progress identified via evaluation measures used, but there were no details provided of these psychometric measures. Despite this, it is reported

that the participant evidenced a significant shift in thinking which was confirmed by other staff within the hospital, and presented as more assertive and confident in many communications. The author also concludes that there was a reduction in self-injurious behaviour (with occasional veiled threats still evident), and that physical attacks on others and blaming of others had declined. There was no description of potential improvements in relation to fire-setting per se.

Hall et al. (2005) offered a less detailed description of CAT therapy (although a reformulation letter was still outlined), and reported that these sessions occurred over 24 sessions. Following treatment it was reported that the male participant began relating to the staff on the ward in a 'different way' (details not provided), and that he utilised a more positive attempt at problem-solving (again, no detail was offered). Finally, it is concluded by the author that post-treatment, the participant had begun to relate in a more positive and complex manner, beyond any initial expectations.

A long term multimodal treatment package for mentally disordered fire-setters residing at Rampton Hospital and its use with a female client was described by Swaffer et al. (2001). This package was delivered through a combination of cognitive behavioural group and individual session work, over a 16 month period and is the only mixed gendered fire-setting group identified in the review. Although a range of assessments were reported pre-treatment, the treatment programme had not finished at the time of writing the article, so no post-assessment evaluative data was reported. However, the authors did provide outcomes based on the treatment to date, reported in a narrative case study account. This indicated that following the completion of the first two modules (of a four module programme), the participant had developed appropriate interpersonal assertiveness skills, and an improved ability to express her emotions safely.

In addition to these cognitive approaches to treatment, a psychoeducational approach targeting a specific deficit was also adopted. The outcomes of a social skills training group in comparison to a control treatment for ten male arsonists in a psychiatric hospital was reported by Rice and Chaplin (1979). These participants were divided into two groups: group one consisted of five participants with a diagnosis of personality disorder and group two consisted of five participants with mild to moderate learning disability and mixed psychiatric diagnoses. Group one received social skills treatment first, whilst the second group received control treatment first (non-directive group psychotherapy). Both groups were tested before treatment, between treatments, and at the end of both treatments. The effectiveness of treatment was assessed using video-taped role-plays which were scored on a range of items (assertiveness, verbal skills, anxiety, and empathy) using a Likert scale. Inter-rater reliabilities were measured using correlation coefficients for all items and ranged between 0.71 to 1.0. Because all the items were highly intercorrelated (ranging from 0.77 to 0.87) they were combined into one measure termed 'social skills'. The first group evidenced significant improvements following Social Skills Training (pre- and mid- testing: $p < 0.05$) but no difference following the control treatment (mid- and post- testing: $p > 0.10$). Consistently, the second group also evidenced significant improvements following Social Skills Training (mid- and post- testing: $p < 0.05$) but not following the initial control treatment (pre- and mid- testing: $p > 0.10$). This indicated that the social skills training had contributed to the improvements in social skills, as opposed to engagement in group treatment per se, or participants' expectancy of change.

The outcome of psychoanalytic art therapy as a treatment for an adult female with an arson conviction was reported within a case study (Delshadian, 2003). The therapy lasted for over two years and although a thorough description was provided into her need to set fires, there

was little description provided of the actual intervention. No outcome measures were reported to have been utilised, but it was reported that whilst in therapy, incidents of fire-setting and self-harm reduced significantly.

One case study reported the effectiveness of aversion therapy as a treatment for fire-setting behaviour in an individual with Schizophrenia (Royer et al., 1971). It was reported that the patient regularly set fires on the hospital ward, although the frequency of these behaviours was not reported. Conditioning sessions occurred over one month (9 sessions) and treatment effectiveness was measured via the latencies of striking a match to lighting a piece of paper, and in terms of time elapsed from picking up the match to striking it. Additionally, the frequency of fire-setting post-treatment was monitored. No statistical analysis of latencies was conducted, although interpretation of results indicated that these increased over sessions (i.e. the participant took longer to strike the match and light the paper). Following treatment, six further incidents of fire-setting were reported and booster sessions of the aversion therapy were conducted following each of these incidents. The last of these incidents occurred six months post-treatment. During the four year follow-up, no further fire-setting incidents were reported.

A further behavioural approach involved the use of four weekly orgasmic reconditioning sessions followed by three weekly covert sensitisation sessions, for the treatment of a 20 year old male with a history of fire-setting as a way of obtaining sexual gratification (Lande, 1980). The orgasmic reconditioning sessions involved masturbation whilst viewing slides of fires, followed by slides displaying nude females. Arousal to fire-related and heterosexual stimuli was measured by taking heart rate and penile circumference changes, as well as subjective reports in response to slides of nude females and fires. These were assessed pre-treatment, following intervention, and at a four-month and nine-month follow-up. No statistical or clinical significance was

calculated in the study, but results indicated that the participant showed larger penile circumference changes to female stimuli and a reduction in circumference to fire stimuli at the follow-up, in comparison to pre-treatment. Consistently, heart rate increased when presented with female stimuli post-treatment (although this reduced by the nine-month follow-up) and there was a reduction in the heart rate between pre- and post- treatment when presented with fire stimuli, which was maintained at the follow-ups. The participant's self-reported sexual arousal was consistent with both of the measures, indicating more attraction towards females over treatment and at follow-up, and reduced sexual arousal when presented with fire stimuli. The authors conclude a reorientation of sexual arousal from fire stimuli to heterosexual stimuli was obtained after a combination of orgasmic reconditioning and covert sensitisation.

DISCUSSION

This systematic review examined whether psychological interventions are effective for adults with a fire-setting history. Of the twelve studies reviewed, the study methodologies included one quasi-experimental design, seven case studies, two case series, and two pre- and post- designs. Nine of the studies were based in the UK, two studies were conducted in the USA (Lande, 1980; Royer et al. 1971), and one study in Canada (Rice & Chaplin, 1979). The majority of the participants were male (68%) and the participants were aged between 19 and 57 years old. Only two of the studies reported cases where the participants had no identified mental health or learning difficulties, with the majority of the studies including participants with diagnosed learning disabilities (seven of the included studies). The remaining three studies included participants with mental illness and/or personality disorders.

The review findings indicated that group intervention utilising a cognitive behavioural approach evidenced improvements in terms of goal attainment, anger, and self-esteem across three studies (Taylor, Thorne, Robertson, & Avery, 2002; Taylor, Thorne, & Slarkin, 2004; Taylor, Thorne, Belshaw, & Watson, 2006) and that these findings were statistically significant (Taylor et al., 2002). However, it is important to consider that the improvements demonstrated by Taylor et al. (2004) and Taylor et al. (2006) are based on sub-samples from the original participant group of the earlier Taylor, et al. (2002) study. Additionally, following intervention there were no further incidents of fire-setting at a two year follow-up for females (Taylor et al., 2006). When a cognitive behavioural approach was combined with facial surgery for a man with a facial disfigurement, there was a reported reduction in hoax calls, and an improvement in emotional expression and interpersonal effectiveness (Clare, et al. 1992). However, the facial surgery itself did not appear to significantly improve independent raters' perceptions of his attractiveness. Improvements in emotional expression and interpersonal effectiveness were also noted for a female participant following a longer term cognitive behavioural intervention delivered through both group and individual sessions (Swaffer, et al. 2003). Interpersonal effectiveness, in relation to 'relating to others' and improved 'communication' was also identified following another form of cognitive therapy: namely, Cognitive analytic therapy (Clayton, 2000; Hall et al. 2005). In contrast to these positive finding, the cognitive behavioural intervention reported by Brown et al. (2000) found no consistent improvements following treatment.

An alternative intervention was a short term Social Skills Group for males with a conviction of arson (Rice & Chaplin, 1979). This group indicated statistically significant improvements in social skills in comparison to an alternative intervention (non-directive group

psychotherapy). Art therapy indicated reductions in fire-setting and self-harming behaviours for a female prisoner (Delshadian, 2003) and aversion therapy indicated a cessation of fire-setting in a Schizophrenic fire-setter which was maintained for four years (Royer et al., 1971). Finally, orgasmic reconditioning and covert sensitisation was considered successful in reorienting a man's sexual arousal from fire-related stimuli to heterosexual stimuli which was maintained nine months post-treatment (Lande, 1980).

Unfortunately, only four studies employed an appropriate statistical method to assess the effectiveness of treatment (Clare et al, 1992; Rice & Chaplin, 1979; Taylor et al, 2002; Taylor et al, 2006). Of these, three found significant improvements post-intervention in terms of psychological functioning (Taylor, et al, 2002; Taylor et al, 2006) and social skills (Rice & Chaplin, 1979). Of these studies, only one included a comparison group and the use of 'blinding' (Rice & Chaplin, 1979) and this is the study that was deemed to have the highest quality during the quality assessment. However, this study did not include random allocation of participants to the different groups (as it was based on age and diagnoses).

The Quality Assessment established to what degree the studies' designs, conduct, and analyses minimised bias and errors, and whether the findings would therefore generalise to wider clinical practice. The quality of the studies within this review were poor overall, with one study failed to meet any of the criteria (Delshadian, 2003) and no studies achieving all of the quality criteria. Overall, although the quality of the studies within this systematic review was limited and caution should be made when drawing conclusions from the findings, interventions have shown some optimistic findings in terms of the effectiveness of intervention for adults with fire-setting behaviour.

The systematic review revealed a dearth of published literature in terms of the effectiveness of interventions for adults evidencing fire-setting behaviour. Promisingly however, 58% of the studies sourced for this review assessed the effectiveness of interventions for adults with a learning disability. This is a strength of the available articles since research has evidenced a clear association between fire-setting and learning disability (e.g. Barron, Hassiotis, & Barnes, 2004; Crossland, Burns, Leach, & Quinn, 2005) and typically, learning disability is underrepresented in studies assessing the treatment effectiveness of forensic interventions.

A further strength of the studies included in this review is the variation of intervention. The articles in this review indicated that interventions used with fire-setters may differ considerably. Jackson's (1994) cognitive behavioural approach was most frequently utilised, however, alternative interventions were described with positive outcomes. This may be due to the heterogeneity of fire-setters however, as research has hypothesised clusters of fire-setters (e.g. Harris & Rice, 1996) and diverse modes or trajectories to fire-setting (Fritzon, 2012; Gannon, et al. 2012), as described in Chapter one. These recent developments in research may have implications for offender intervention, as treatment should be planned in relation to the characteristics of the act (e.g. Häkkänen et al. 2004) and in relation to the critical risk factors of fire-setters (Gannon, et al. 2012). Therefore, you may expect that different fire-setters may require different interventions addressing their specific deficits (e.g. social skills: Rice & Chaplin, 1979) consistent with the treatment recommendations highlighted in Chapter one (Table 1). Alternatively, those interventions that address a wide range of targets (e.g. Swaffer, et al. 2001) might also hold promise when designing an effective treatment for all fire-setters.

Unfortunately, there are a number of weaknesses related to the articles utilised in this review. Firstly, some of the measures used (Fire Attitude Scale and Fire Interest Scale) have

limited psychometric evaluative data making it difficult for the authors to draw any firm conclusions about the scores following interventions. Additionally, a number of the studies depended exclusively on staff reporting improvements based on their observations during and following treatment (Clare et al., 1992; Clayton, 2000; Delshadian, 2003; Swaffer, et al. 2001). As no 'blinding' was used, it is possible that their knowledge of the participants' engagement in treatment may have influenced their perceptions, resulting in a 'placebo effect'.

As mentioned previously, only one of the studies had a comparison group/case. This has implications on the interpretation of findings as a lack of comparison can often make it appear as if there is an association between the intervention and the outcomes, when this may not be the case. The majority of the articles (nine of the twelve) were either a case study or case series design. There are a number of weaknesses to this design which may affect the validity of the study. Selection bias was evident in the majority of studies in that there were no reported criteria for the selection and frequency of selection. For example, it was unclear whether cases were consecutively selected and whether participants volunteered for treatment. In the case study presented by Lande (1980) the participant volunteered to engage in treatment challenging the generalisability of these findings to those who may present as less motivated to engage. A further bias that frequently occurs with case study and case series is researcher bias. Clinicians tend to report their best outcomes rather than present consecutive cases. For example, Taylor et al. (2004) report the cases of four males who attended group intervention but made no reference to whether these were the only participants of the group or whether they were selected cases.

One study that reported the selection criteria for treatment (Taylor et al., 2006) stated that it was based on the pre-admission assessments and their potential to benefit from involvement in a programme designed to address their fire-setting behaviour. If selection was made on the basis

of having 'high scores' in the pre-assessments it may question the internal validity of the study due to regression-to-the-mean (Cook & Campbell, 1979). Extreme test values are statistically likely to move to average over time. When extreme scorers make improvements (as evidenced during the study) it may be falsely attributed to the intervention. A comparison group may have exposed this.

Researcher bias can occur when the clinicians' beliefs and hopes affects the outcome resulting in performance bias. Clare et al. (1992) reported a case of a man with facial disfigurement which was hypothesised to be a contributing factor to fire-setting behaviour due to its contribution to his inarticulate speech and social isolation. Following surgery and combined psychological intervention, positive improvements are noted in terms of social skills and emotional expression. However, independent raters found no significant improvement in his attractiveness post-operation. Nevertheless, the difficulties that were proposed to be a result of his facial disfigurement were reported to have improved. This may have been related to the other elements of treatment (but no pre- or post- outcome measures were used to evidence this), but instead is concluded to be associated with the 'treatment package' (which includes the surgery) consistent with the clinician's initial beliefs. If it was not related to the treatment effectiveness overall, it may raise ethical issues for the study (particularly as the learning disabled man refused facial surgery initially but agreed to it when the issues were raised again).

A difficulty in evaluating the effectiveness of treatment in relation to recidivism is the self-limited nature of the behaviour. Depending on the nature of the fire-setting behaviour each individual presents with, it is possible that the participant would not have set another fire regardless of treatment, especially within a supervised setting (as evidenced in all papers). Seven cases report participants who have only set fires whilst out of hospital/prison (Brown et al., 2000;

Clare et al., 1992; Lande, 1980; Swaffer et al., 2001; Taylor et al., 2002; Taylor et al., 2004) making it difficult to draw the conclusion that the lack of fire-setting incidents within supervised settings is evidence of treatment effectiveness. Even when follow-up was noted post-discharge (Clare et al., 1992), the participant remained within a supervised community placement. However, it should be noted that two cases explicitly referred to the participants setting fires whilst in hospital (Royer & Flynn, 1971; Taylor et al., 2006) and both showed cessation of fire-setting behaviours post-intervention at four year and two year follow-up respectively.

Confounding variables may also impact the internal validity of the articles included in this review. In one study, co-intervention (i.e. another intervention occurring alongside, or immediately following the fire-setting intervention but during the assessment stage) was reported (Lande, 1980). The inclusion of social skills training during the follow-up period, may have contributed to the maintained improvements identified, but this was not acknowledged in the article. Additionally, intervention that occurred over a considerable period such as two years of Art Therapy as reported by Delshadian (2003) and the sixteen month structured multimodal cognitive behavioural approach by Swaffer et al., (2001) are also threatened by 'history' (things changing in their environment at the same time as the intervention) and 'maturation' (participants changing over time but unrelated to the intervention) (Cook & Campbell, 1979, p. 51-55).

As 91% of the articles in this review were published research, it should not go unmentioned that 'publication bias' may go some way in explaining the apparent success of interventions for adults with fire-setting behaviours. In fact, the one unpublished article incorporated in this review (Brown, et al. 2000), only achieved one of the quality criterion during

the assessment. Despite this, it was later reported in a chapter by Hall, Clayton, and Johnson (2005).

Limitations of Systematic Review

Despite the concerns regarding the validity of the conclusions drawn in the research articles, this review does shed some light on the type of interventions that have been provided for adults with a history of fire-setting behaviour. Cognitive behavioural approaches were the most frequently used intervention for adults. However, the external validity of the articles in this review is limited. Despite a wide search for interventions for adults with fire-setting behaviour, all the papers included in this review reported interventions that occurred in highly supervised settings: psychiatric hospitals (three studies); medium secure hospitals (two studies); an inpatient behaviour therapy unit (one study); learning disability forensic hospitals (five studies); or a prison (one study). Additionally, the majority of studies were restricted to adults with a learning disability and/ or a psychiatric disorder. Only two case studies reported intervention for adults without these diagnoses (Delshadian, 2003; Lande, 1980). Restrictions in terms of ‘setting’ and ‘selection’ limits external validity (LeCompte & Goetz, 1982) making it difficult to generalise findings to outside of these groups.

The methodology within this review also has some weaknesses. First, included studies were abstracted by only one researcher. Although selected articles were reviewed by a second researcher as part of the quality assessment, initial selection bias may exist during the screening process. One of the overriding limitations of this review is the limited quality of the articles reported within it. Unfortunately, there are currently no studies that include alternative study designs (such as random controlled trials) therefore it was not possible to eliminate studies of

poorer quality in order to increase the overall quality of findings within the systematic review. Only one review regarding interventions for adult fire-setters has been conducted which was for the Office of the Deputy Prime Minister (Palmer, Caulfield, & Hollin, 2005). This review was restricted to specific organisations and had very stringent inclusion criteria which resulted in no studies being reported. The current systematic review has broadened the research to include any organisation or independent practitioner anywhere in the world, and has not restricted studies on the basis of quality. This allowed for twelve studies to be reported and reviewed offering a wider picture of the interventions provided to adults who set fires, and whether these are effective in terms of improving psychological functioning, developing skills, and reducing recidivism.

Conclusions and Recommendations

The findings from this systematic review indicate that psychological interventions may be effective in adults with fire-setting behaviours by improving psychological well-being (self-esteem, anger, depression), developing interpersonal and social skills, enhancing emotional communication, reducing sexual arousal to fire-related stimuli, making improvements on offence related treatment targets, and in reducing future fire-setting behaviours. This has implications in terms of the current availability of treatment specific to fire-setting for adults, which has been previously viewed as limited due to the heterogeneity of this population (as discussed in Chapter one). However, this review has highlighted the need for further research to investigate treatment effectiveness using study designs that are of high quality (such as random controlled trials or studies with the inclusion of comparison groups and reliable outcome measures). Until this time, the effectiveness of interventions should be viewed with caution, but should not be dismissed in their entirety. The preliminary results provide encouragement for the potential benefits of

developing more robust evaluations for specific intervention targeting fire-setting behaviour for the adult population, and provide a useful starting point for practitioners either working with, or contemplating work with this challenging and complex client group.

CHAPTER FOUR:
THE EXPERIENCES OF MENTALLY DISORDERED OFFENDERS WITHIN A
STRUCTURED FIRE-SETTING TREATMENT PROGRAMME:
A QUALITATIVE APPROACH

ABSTRACT

This study explores the experiences of mentally disordered offenders engaged in a structured fire-setting treatment programme in a low secure hospital. There remains some debate within the literature in relation to the approach to treating adults who intentionally set fires, and yet the client's perspective on this is neglected. There are no studies that use qualitative methodology to explore the experiences of service users engaging in treatment for fire-setting behaviour. Five participants with a history of intentional fire-setting during adulthood, engaged in a longitudinal study over five months exploring their experiences of treatment prior to it commencing, and on completion of the programme. Interpretative Phenomenological Analysis (IPA) was employed to analyse the data. Six super-ordinate themes were revealed: 'Relevance of Fire-setting Treatment'; 'Effects of Treatment'; 'Factors influencing Attendance'; 'Content and Structure'; 'Therapeutic Relationship'; and 'Relating to Others'. The findings suggest several ways in which treatment programmes can be effectively designed to meet the needs of service users with a fire-setting history. The limitations of the current study are discussed.

INTRODUCTION

The literature on psychological interventions for those who intentionally set fires tends to be limited to the child and adolescent fire-setter (see Palmer, Caulfield, & Hollin, 2007). Arson treatment remains a relatively unmet need within the adult criminal justice system and mental health systems. Despite this, there are a small number of arson treatment programmes delivered within forensic mental health services (Palmer et al.). Consistent with this, a systematic review on the effectiveness of fire-setting interventions (as discussed in Chapter three), indicated that of the twelve articles identified only five were published within the last decade, and that four of these studies were conducted within mental health inpatient services.

The lack of fire-setting treatment programmes amongst adults is considered to be a reflection of the heterogeneous nature of this group (i.e. the varying motivations and characteristics of fire-setters) (see Chapter one for a review), and this makes it difficult to identify relevant dynamic risk factors (i.e. motivation) which can be targeted within treatment (Gannon & Pina, 2010). Inevitably, mentally disordered fire-setters frequently receive treatment either tailored to their individual needs (i.e. addressing the underlying function of their fire-setting or providing a more complex individualised package addressing a number of contributing factors to their fire-setting behaviour), or they are required to attend generic treatment programmes (e.g. addressing core components of their fire-setting, but not the fire-setting in and of itself).

Individualised psychological treatment developed from the identified psychological understanding of one person and their specific psychological needs is undoubtedly beneficial. For example, as detailed in Chapter three, Clare, et al. (1992) developed a treatment programme

for a learning disabled male fire-setter based on the clinical formulation of his fire-setting behaviour, which included cognitive behavioural therapy, teaching of coping skills, and facial surgery. Positively, the findings indicated no further fire-setting four years post-treatment. However, such individualised treatment packages have limitations. Firstly, there are resource implications of delivering such detailed packages in a mental health setting. Clare et al., described the cost of the treatment as considerable (requiring seventeen months of hospital admission, facial surgery within a general hospital, and therapeutic resources providing a full programme of day activities including sessions of education, sport, craft, and daily living skills). Resource implications are particularly important at present, given the economical downturn and the associated constraints on funding available for mental health services, and its anticipated knock on effects to the criminal justice system (Royal College of Psychiatrists, NHS Confederations Mental Health Network, and the London School of Economics and Political Science, 2009).

A further limitation of individualised treatment is that despite research identifying many potential psychological deficits amongst mentally disorder offenders, there is limited guidance within the literature on what treatment should include or exclude. Just as unstructured professional risk judgments are open to subjective bias due to their lack of guidance of which risk factors to include (e.g. Dawes, Faust, & Meehl, 1989), unstructured treatment packages may fail to take into account all the identified individual factors that may increase or reduce the risk of future recidivism.

Alternatively, generic treatment programmes are used which address specific psychological deficits identified in the individual fire-setter. For example, Rice and Chaplin (1979) identified poor interpersonal skills amongst a group of arsonists and developed an eight

week social skills training programme to improve these deficits. Treatment outcomes indicated significant improvements in social skills and there were no reported fire-setting behaviours one year post-discharge from hospital. However, as the patients received other therapy during hospitalisation it is difficult to attribute the post-release success to the social skills training alone. Additionally, there is no longer term data regarding the effects of social skills training on fire-setting behaviour.

Gannon and Pina (2010) reported that the majority of treatment offered for fire-setters focuses on generic offending behaviour. The main criticism of these approaches is the lack of emphasis on the fire-setting behaviour, and the disregard of the importance of addressing the cognitions in choosing fire-setting to address these needs, as opposed to another behaviour or type of offence. For example, Swaffer (1994) proposed treatment recommendations for three juvenile case studies based on an individual formulation of their fire-setting behaviour. Two of these recommendations did not include any offence work, but a focus on re-addressing the psychological needs of the individuals that may have contributed to the use of fire-setting. Fire-focused work was only recommended in the single case where fire was proposed to have arousing properties for the teenager. Similarly, Miller and Fritzon (2007) made recommendations for the treatment of female fire-setters residing in special hospitals, suggesting for example, the exploration of alternative ways of managing emotions as opposed to any recommendations of addressing the choice of criminal behaviour as a means of coping with their difficulties.

This inconsistency between the use of generic (and not fire-related) treatment approaches with fire-setters in comparison to other offenders is confusing. For example, a sexual offender who molests a child for a function besides sexual arousal (e.g. intimacy deficits, as described in Ward and Siegert's (2002) Pathways Model), is unlikely to be referred for treatment that focuses

on enhancing their interpersonal effectiveness skills alone. It is likely that the offender would be required to explore and challenge the cognitions that allowed them to engage in this behaviour (in addition to their psychological deficits) and consider the other factors that may have contributed. Despite the role of enhancing offence awareness and exploring the role of cognitions within other offender multimodal treatment interventions (e.g. SOTP), this is not typically the case within the treatment of fire-setters.

Treating fire-setting behaviour without directly discussing and confronting the fire-setting is a criticism of many treatment programmes delivered for adult fire-setters (Raines & Foy, 1994). It may be misguided to assume that by addressing the underlying pathology, practitioners are ameliorating fire-setting. This approach may also question the validity of any assessments of future risk for fire-setting. Furthermore, not discussing the fire-setting may be minimising the destructive nature of the behaviour and may reinforce the individual's own beliefs about the acceptability of setting fires as a means of coping. Finally, as fire-setting has been described as a behaviour that may eventually lead to crimes against property and the person (e.g. Hill, et al., 1982), it is important for professionals to address some of the fundamental antisocial beliefs and attitudes underpinning their behaviour.

Therefore, specific fire-setting treatment may be important as it would enable individuals to comprehend their offence cycle, and develop an understanding of the emotional, cognitive, and situational antecedents to their offence. Stewart (1993) describes how a relapse prevention approach may meet these needs. Recent attempts of using psychological models developed for other offending behaviour (e.g. Ward & Seigert's (2002) Action Systems Model for Sexual Offending) to account for fire-setting behaviour (Fritzon, 2012), and the recently developed Multi-trajectory Theory of Adult Fire-setting (Gannon, et al. 2012), bring together a number of

single theories of fire-setting into one comprehensive model and highlights different psychological origins or pathways to fire-setting, as described in Chapter one. This offers the possibility to provide modular treatment similar to that adopted for adult sexual offenders (such as the SOTP programme). In other words, it may allow for heterogeneous groups to be targeted collectively within one treatment programme that addresses the multiple and various individual needs that may have contributed to the offending behaviour.

Attempts at developing treatment programmes that address the heterogeneric profile of the individuals who set fires have been made, but are mostly confined to the learning disability population. As described in Chapter three, Taylor, Thorne, Robertson, and Avery (2002) developed a cognitive behavioural programme aimed purely at reducing fire interest and attitudes associated with the behaviour and found significant improvements in terms of fire specific thoughts, anger, and self-esteem. Hall, Clayton, and Johnson (2005) describe a further cognitive behavioural group programme for adults with learning disability which covered introduction to fire sessions, personal fire-setting, and alternative ways of coping with positive outcomes. However, both studies had a lack of follow-up assessment data including recidivism rates.

Swaffer, Haggett, and Oxley (2001) developed a treatment programme for mentally disordered fire-setters (only one client had a borderline learning disability) which included exploration of the dangers of fire-setting, enhancing coping skills, increasing self awareness, and relapse prevention work. This programme attempted to accommodate the heterogeneous nature of fire-setters by including additional individual therapy sessions. It was reported that this was a time and cost effective approach to treatment. Similar programmes have been developed in Broadmoor Hospital over recent years for individuals with multiple fire-setting incidents and a diagnosis of personality disorder or learning disability (personal communication 2004 as cited by

Russell, Conway, & McNicholas, 2005). Similarly, a fire-setting programme (named the *RESCUE* fire-setting treatment programme) has been developed by the current author for adults with mental disorder and/or personality disorder residing within a low secure forensic hospital.

RESCUE Fire-setting Treatment Programme

The *RESCUE* fire-setting treatment programme is a sixteen session manualised programme. Similar to the programme devised by Swaffer et al. (2001), the programme has four modules divided into two psycho-educational components (Understanding Fire and Enhancing Coping Skills) and two cognitive behavioural therapeutic elements (Exploring Fire-setting Behaviours and Preparing for the Future). An overview of the content covered within each module and how it aims to target the psychological needs and risk factors outlined in Chapter One, can be found in Appendix E.

As a manualised programme, each session outlines the aims of that session, teaching points to be made, has set exercises, group discussions, and homework practice, and can be delivered either within a group format for two hours once a week (with regular individual sessions to provide tailored support in relation to service users' own personal experience of fire-setting and their specific needs) or individually for one hour once a week. The group is delivered by two facilitators (so can be multidisciplinary), and the individual sessions are provided by psychologists.

Service Users' Experience of Treatment

Although the outcome data on fire-setting treatment programmes in Chapter three have shown that clients have improved in terms of their psychological functioning and cessation of

fire-setting behaviour, our understanding of why and how these programmes work remains limited. The quantitative research completed to-date offers clinical and economical data which suggests the effectiveness of specific fire-setting treatment programmes. However, it fails to account for the individuals' experiences of the treatment and their perceptions of what treatment requires. The clients' account of their experience is vital to our understanding of treatment effectiveness, and yet is often overlooked in research (Paulson, Everall & Stuart, 2001). Qualitative research aims to represent the experiences and actions of people as they encounter, engage, and live through situations (Elliot, Fischer, & Rennie, 1999). It offers a richer understanding of their experience in their own words as opposed to within pre-defined categories developed by the researcher or within psychometric measures.

Exploring the clients' views of what makes a difference to them, and how they experience the process of therapy may offer important contextual information that increases our understanding of what contributes to effective intervention (McLeod, 2001). It may also result in the emergence of unexpected issues not covered through quantitative analysis alone (Hodgetts & Wright, 2007), and identify the effective components, permitting outcome and cost efficacy (McManus, Peerbhoy, Larkin & Clark, 2010).

Previous qualitative research has explored the clients' experiences of hindering factors in counselling (e.g. Paulson, Everall, & Stuart, 2001) and positive experiences in therapy (e.g. Timulak & Lietaer, 2001, Williams, McManus, Muse, & Williams, 2011). Similar research may be even more important within forensic settings given that the lives of forensic patients are described typically in terms of 'expert discourses' (Sullivan, 2005), meaning that empirical approaches using psychometric measures and/or professional views are given greater weight than the view of the service user. However, the use of qualitative research within forensic settings is

relatively limited. Some research has focused on offenders' experiences of the Sexual Offenders Treatment Programme (e.g. Beech, Oliver, Fisher, Beckett, 2005), although in some cases detailed narratives are lost as data is converted into numerical form (i.e. when percentages represent the sample's experience of a theme).

Studies that use qualitative methodology to investigate the subjective experience of a treatment programme for mentally disordered adults residing within forensic settings are even less common. Similar to the research conducted by Beech, et al. (2005), the experience of six learning disabled adults within a fire-setting treatment programme were sought by Hall, Clayton, and Johnson (2005). Unfortunately, the detailed narratives of this study were also omitted by categorizing narratives into areas of treatment perceived as 'most difficult', 'enjoyable', and 'useful'. The research provided evidence that participants enjoyed 'other people's company', 'listening to other people's problems' and 'sharing information', which is consistent with previous suggestions that group therapy is advantageous in providing an environment of shared experiences for patients (e.g. Todd & Bohart, 1999). However, this study, along with the analysis of Beech et al. (2005) on sexual offending treatment, lacked transparency both in terms of providing detailed methodology and a robust qualitative analysis of data.

To date, there is only one published study identified that used an Integrative Phenomenological Approach with mentally disordered offenders. This explored the experiences of dual diagnosis service users within a drug and alcohol relapse prevention programme (Ritchie, Weldon, Macpherson, & Laithwaithe, 2010). However, there has been no qualitative research offering appropriate and transparent qualitative approaches in exploring the experiences of mentally disordered offenders within a fire-setting treatment programme. Such an approach has the potential to add to our understanding of what it is like for mentally disordered offenders to

engage in a fire-setting treatment programme, and thus has the potential to inform future approaches to treatment.

The main research question was therefore:

How do mentally disordered offenders experience a structured Fire-setting Treatment Programme?

Related to this main research question, the following areas of interest were explored:

1. What is it like to be a service user within a fire-setting treatment programme?
2. How is the experience of a service user understood in the context of an impending fire-setting programme?

METHODOLOGY

Interpretative Phenomenological Analysis

Interpretative Phenomenological Analysis (IPA) is a qualitative approach which aims to “explore in detail how participants are making sense of their personal and social world” (Smith & Osborn, 2008, p.51). Exploration on an individual’s experience is consistent with the research question of how mentally disordered offenders experience a structured fire-setting treatment programme, and therefore, IPA was deemed an appropriate qualitative approach for this study. Equally, its idiographic nature is also in keeping with the aims of the study, in that it is concerned with revealing something about the experience of each of the individuals involved, and being able to say something in detail about the participant group. As Smith, Flowers, and Larkin (2009, p.29) identified IPA is:

“....committed to understanding how particular experiential phenomena (an event, process, or relationship) have been understood from the perspective of particular people in a particular context”.

Therefore, the aim of this approach is not to make generalisations about larger populations but to arrive at general claims after the detailed analysis of individual cases (Smith, et al., 2009; Smith & Osborn, 2008).

There is a growing body of IPA research within health, clinical, counselling and social psychology (see Brocki & Wearden, 2006; Smith, 2004) demonstrating its value in psychological research, yet to date there has only been one published IPA study in relation to the experience of

therapy or psychological treatment programmes amongst mentally disordered offenders (i.e. Ritchie, et al, 2010).

Why not a different qualitative method?

IPA was chosen over Grounded Theory as Grounded Theory tends to be viewed as more of a sociological approach (Willig, 2003), drawing on convergences within a larger sample to support wider conceptual explanations. IPA, by contrast, is more psychological, as it is more concerned with the detailed account of the personal experiences of a smaller sample (Smith, et al., 2009), which was felt to be more in keeping with the study's aims.

Discourse Analysis was also deemed unsuitable, as this approach tends to focus on language more in terms of its function in constructing social reality, and it is cynical regarding the accessibility of cognitions. IPA, in comparison, recognises that although cognitions are not transparent within verbal reports, the analytic process may offer something about the sense- and meaning-making involved in such thinking (Smith, Flowers, & Osborn, 1997).

Design

The study employed a longitudinal qualitative research design with each participant interviewed prior to commencing the treatment programme and at the end of the treatment programme (which spanned 16 sessions). A longitudinal approach was selected to gain a detailed understanding of an individual's experience of the treatment programme, including their anticipations prior to commencing it. The thoughts and emotions of an individual once invited to engage in treatment, but prior to commencing it (e.g. anxiety and pre-conceptions of treatment), were considered to be an important part of the 'experience' of engaging in psychological

intervention, and the aim of the pre-interview was to capture this element. It was likely that individuals may have experienced a change in their thoughts and feelings through the course of treatment, and that this may not have been reflected or recalled during a single interview at the end of the programme.

Four of the participants within this study received both group and individual sessions, and one participant received individual sessions only (due to insufficient female clients to develop a group). The group facilitators of the RESCUE fire-setting treatment programme were a Trainee Forensic Psychologist and an Occupational Therapist. The individual therapists included a Trainee Forensic Psychologist and an Assistant Psychologist (under the supervision of a Clinical Psychologist).

Participants

Participants were recruited from a forensic low secure hospital in South Wales for adults with a range of mental health difficulties and personality disorders. The hospital consists of a multidisciplinary team comprising of psychiatrists, psychologists, Dialectical Behaviour Therapist, Cognitive Behaviour Therapist, Occupational Therapists, Drug and Alcohol Counsellor, Dieticians, and Nursing Staff.

In keeping with IPA requirements, a purposive sample of participants was used to have a small and fairly homogenous sample of mentally disordered fire-setters. Consistent with the research on this client group, homogeneity was limited to some degree in terms of psychiatric diagnosis and motives for fire-setting.

Five participants were recruited in total, which was considered an appropriate sample size to gather a detailed account of individual experience. Smith, et al. (2009) emphasises the

importance of concentrating on a small number of cases when using IPA. Smith and Osborn (2003) reported that five to six participants is a suitable number for research, and Smith, et al. recommended between three and six participants within a student project. Smith, et al. go on to state that it is ‘important not to see the higher numbers as being indicative of ‘better’ work’ (p.52).

Inclusion and Exclusion Criteria.

To be included within the structured Fire-setting Treatment Programme, participants had to be currently detained under the Mental Health Act (1983) and residing within a secure forensic hospital. There were no exclusions on the basis of gender or mental health diagnosis (including mental disorder and personality disorder) but participants were excluded if they were experiencing active psychosis at the time of assessment.

Participants had to have a full scale IQ of 75 or above, and a diagnosis of learning disability resulted in exclusion from this treatment programme. Although research has identified a strong association between fire setting and learning disability (e.g. Crossland et al., 2005), the RESCUE fire-setting treatment programme was developed purposively for adults with general cognitive abilities. The RESCUE programme would require significant adaptation to both the content and the teaching approach in order to meet the needs of individuals with cognitive impairments (consistent with the responsivity principle for effective treatment: Andrew & Bonta, 1998). It was for this reason that this exclusion criterion was included into the study.

Furthermore, all participants had to be aged 18 years or older, and had to have had a history of intentional fire-setting since adulthood. Participants with a history of childhood fire-play alone were excluded. For the purpose of this study, being non-English speaking was an

exclusion criteria as qualitative research relies heavily on language and there were concerns that the richness and depth of meaning would have been lost if a translator was used. However, as all the clients referred for the treatment programmes were English speaking as a first language, it was not necessary to exclude anyone for this reason.

The Sample.

The five participants in this study consisted of four males and one female. The ages ranged between 22 and 45 years. The sample was varied in terms of mental health section and diagnosis, and the history/motive of fire-setting behaviour. The majority of the sample was 'White British' but one participant was of mixed ethnicity (White/Eastern European British). The length of detention within hospital, Mental Health Act (MHA) (1983) status, relationship status, diagnoses, fire-setting history, and proposed motives for each participant was gained from clinical reports. All participants had completed the Millon Clinical Multiaxial Inventory – 3rd Edition (MCMI-III) with the intention of gaining an objective measure of the psychopathology of each individual (see Chapter two for a review of the MCMI-III and its hypothesised reliability with mentally disordered fire-setters). The details of these are provided in Table 6. Pseudonyms have been used to protect patient confidentiality.

Of these five participants, four received group treatment with additional individual therapeutic support, and one participant (Louise) received the same programme through individual therapy alone.

Table 8 – Participant Characteristics and Demographics

<i>Alias</i>	<i>Age</i>	<i>Diagnosis</i>	<i>MCMI-III Personality Indicators⁹</i>	<i>MHA Section</i>	<i>Duration of Detention</i>	<i>Marital Status</i>	<i>Ethnic Origin</i>	<i>History of Fire-setting</i>	<i>Identified Motives</i>
Louise	27	Borderline Personality Disorder	Borderline Personality Patterns >85 Dependent Personality Patterns >75 Anxiety > 75	3	3 years	Single	White British	No fire-play as child 4 x intentional fire-setting inc: set fire to flat: Sig. damage and risk to others. No arson conviction	Emotional regulation Seeking support
Matthew	45	Complex Personality Disorder (Antisocial and Narcissistic traits) Bipolar Disorder	Antisocial, Narcissistic, & Negativistic Personality Patterns >85 Somatoform > 75	37/41	15 years	Single	White British	Fire-play as child 2 x set fire to industrial premises Set fire to car park One conviction of arson	Revenge To get change of premises
Harry	22	Pyromania Aspergers Syndrome	Schizoid & Avoidant Personality Patterns >75 Anxiety > 85	37/41	1 ½ year	Divorced	White British	Fire-play as child Numerous conviction of arson: cars and pubs main targets	Sexual arousal
Steve	29	Antisocial Personality Disorder Alcohol Dependence	Antisocial and Paranoid Personality Patterns >75 Alcohol Dependence >85 Dysthymia >75	3	1 year	Engaged	White British	No fire-play as child 3 x fires within group homes/ secure hospitals No conviction of arson	To get a change in placement
Oscar	23	Drug-Induced Psychosis Dependent Personality Disorder	Dependent, Avoidant, & Antisocial Personality Patterns >85 Anxiety >75 Drug Dependence > 85	37/41	3 years	Single	White British/ Eastern European	Fire-play as a child Numerous fires set to woodland and rubbish No conviction of arson	Express anger To alleviate boredom Excitement

⁹ As indicated in Chapter two, the MCMI-III suggests the presence of a disorder if the score is above 85, and the presence of traits if the score is above 75.

Louise.

Louise is a 27 year old white female with a diagnosis of Borderline Personality Disorder. Louise is one of three children raised by her mother. Louise has no reported history of fire-play during childhood and adolescence. Prior to detention in hospital three years ago, Louise was living in her own flat. Louise reported setting a couple of fires in the family home as an adult (to furniture and to clothing) but that these were extinguished quickly, and not reported by her family to the police or mental health services. Quickly following these fires, Louise set fire to the bed in her flat. Louise contacted the fire services, and the fire was extinguished. There was some cosmetic damage to the flat. Louise was moved to a Psychiatric Intensive Care Unit and discharged six months later into the community. It was relatively soon after this discharge, that Louise set fire again to her flat, and this resulted in considerable damage to this property and adjoining properties. Louise was sectioned under Section 3 of the MHA (1983) and transferred to her current placement. In addition to her formal diagnosis of Borderline Personality Disorder, the MCMI-III indicated the presence of Dependent personality traits, and anxiety. Initial assessment indicated that the motivation for fire-setting was both emotional regulation and to gain support from others. Louise has no other criminal convictions and reported offending behaviours.

Matthew.

Matthew is a 45 year old white male, with a long history of psychiatric difficulties. Matthew has a diagnosis of both Complex Personality Disorder (encompassing antisocial and narcissistic traits) and Bipolar Disorder. In addition to his formal diagnoses, the MCMI-III identified further Negativistic personality patterns (raised to the disorder level), and traits of Somatoform. Matthew has reported setting fires during childhood along with his peers ('grass

fires'). At the time of his arson offence, Matthew was living independently in a flat. Matthew denies the charge of arson as intentional fire-setting, but acknowledges two further incidents of deliberate fire-setting to the workplace around this time. Recent discussion around these incidents indicated that Matthew engaged in these fire-setting incidents in attempt to seek revenge on his employer, and to change the premises in which he worked (which Matthew felt were unsatisfactory at the time). Matthew was never charged with these offences. Matthew has other criminal convictions including Grievous Bodily Harm following a significant attack on a female staff member during his detention within secure hospitals. It was a result of these other criminal convictions (which occurred 15 years ago) that Matthew was sectioned under Section 31/41 of the MHA (1983).

Harry.

Harry is a 22 year old white male with a significant history of fire-setting behaviour dating back to childhood. Initially, this involved fire-play at the age of 13 (burning paper in his garden), but this escalated to a considerable number of incidents of intentional fire-setting directed at vehicles and buildings. Harry has a number of convictions for Arson Reckless as to whether Life Endangered, and Arson. Harry also has additional driving offences. Harry has received custodial sentences for previous arson offences. His last offence occurred in 2011 when he set fire to four vehicles, and since then Harry has resided in a low secure hospital under Section 37/41 of the MHA (1983). Harry has a diagnosis of Aspergers Syndrome and Pyromania and reports that he set fires for sexual gratification. Traits of Schizoid and Avoidant personality patterns were identified by the MCMI-III (however his individual 'items' appeared more

consistent with his diagnosis of Aspergers Syndrome), along with a significant elevation in anxiety.

Harry is an only child, and lived with his parents prior to the recent hospital admission, following the breakdown of his relationship. He has one child with his ex-partner.

Steve.

Steve is a 29 year old white male with a diagnosis of Antisocial Personality Disorder and Alcohol Dependency. These diagnoses were confirmed through the MCMI-III; however, this assessment also indicated traits of Paranoid personality patterns, and Dysthymia. Steve is engaged and maintains regular contact with his fiancée. Steve has a history of criminal convictions in relation to being drunk and disorderly, breach of the peace, and common assault. Steve is an only child and he lived independently in the community prior to the age of 24. Due to increasing risk to self, Steve was admitted to psychiatric services at this time, and it was within these settings that Steve committed acts of Arson. The initial offence occurred within a community placement when Steve set fire to his bedroom, and the remaining offences occurred within the psychiatric hospital ward (and resulted in the fire brigade being required). The last fire occurred in 2011, and resulted in his detention within his current placement under Section 3 of the MHA (1983). Steve reported motivation for setting fires is to change placements, and that his behaviour has been effective in achieving this on all occasions. Steve also reports that he sets fires in order to express his anger and annoyance to others. Steve has no history of childhood fire-play.

Oscar.

Oscar is a 23 year old male with mixed ethnicity. Oscar has one sister, and was residing with his mother in the family home during his fire-setting incidents. Oscar reports a history of fire-setting behaviour dating back to adolescence, and his fires typically involved the collection of fuel materials (e.g. newspaper, wood, etc) and then driving to remote spots where he would set the fires. These occurred on a frequent basis (weekly) as an adult; however the nature of the offences resulted in Oscar never being caught engaging in these behaviours. Oscar has a number of criminal convictions including driving offences and wounding. In 2009, Oscar was given a custodial sentence for wounding, and was transferred to his current placement a few months later under Section 37/41 of the MHA (1983). Oscar has a diagnosis of Dependent Personality Disorder and Drug Induced Psychosis. The MCMI-III confirmed Dependent Personality Disorder and Drug Dependence, and but also highlighted Avoidant and Antisocial Personality Disorder, and significant feelings of Anxiety. It was within his current placement, that Oscar disclosed his fire-setting behaviours and described how he would set fires historically in order to alleviate his boredom and feel 'excited'.

Procedure

Ethical Consideration.

Ethical approval was obtained from the University of Birmingham and granted by the NHS Research Ethics committee. NHS ethical approval was sought, as service users are funded through NHS allocations managed by commissioning processes through primary care trusts, specialist commissioning teams, and local health boards in Wales. Supporting documentation can be found in Appendix F.

Informed consent.

Clinicians within the hospital were provided with copies of both the inclusion and exclusion criteria for the fire-setting treatment programme and a programme summary, and were asked to make appropriate referrals to the psychology department. Referrals were assessed as suitable by the psychology department based on the outlined inclusion/exclusion criteria, and were approached to attend a Fire-setting Treatment Programme.

Once individuals consented to their involvement in the treatment programme, they were provided with a Participant Information Sheet (see Appendix G) and asked whether they wanted to be involved in the research project. This information sheet clearly set out information about the study, the purpose of the research, what taking part would involve, who would have access to data, and how data would be stored. Emphasis was made that this was voluntary and that refusal would not impact their involvement in the treatment programme or the quality of the care they received from the hospital. Participants were also informed that they could withdraw from the study at any time, without needing to give a reason for doing so. If participants expressed an interest to be involved in the research project an appointment was made to go through the consent form (Appendix H) and to be interviewed pre-treatment. On completion of the treatment programme, a further appointment (with an interviewer independent to the treatment programme) was made to complete post-interviews. A signed copy of the consent form was placed in the psychology file and in their psychiatric file.

Individuals who refused to give their informed consent were excluded from the study, but still invited to participate within the treatment programme.

Confidentiality.

Participants were fully informed about confidentiality and its limits. They were aware that transcriptions would have all identifying information removed. They were aware that personal quotes may be used in the research report but that these would be anonymised. They were also aware that access to their clinical file would be required and that research supervisors would have access to anonymised transcripts in order to help with analysis.

The limits of confidentiality were also discussed and participants were informed that if there were any concerns about the safety or welfare of themselves or another person, their clinical team within the hospital would be informed.

Affiliation of the study.

The information sheet highlighted the voluntary nature of their involvement with the research project, and that the psychological service that they received would not be affected in any way. This was particularly important as the researcher worked within the hospital in which the service users currently resided. The post-treatment interviews were conducted by an independent psychologist experienced in conducting semi-structured interviews, due to the therapeutic involvement of the researcher within the treatment programme.

Data Collection.

Interview Design.

Two semi-structured interviews were developed (see Appendix I) which were relevant to the study aims of understanding the experience of engaging in a structured fire-setting treatment programme, including their experience prior to commencing the treatment, the aspects they

found particularly helpful or unhelpful, and the perceived impact of the programme on the individual. The interview schedules offered flexibility and probing into unanticipated areas as they emerged during the interview, allowing the interviewer to explore the respondents perception of what is important in relation to the topic rather than what the researcher considers to be important.

A pilot interview was conducted in order to test the interview schedules and obtain feedback from the pilot interviewee regarding the process of the interview and any suggested amendments. No alterations were identified through the pilot interview.

Interview Procedure.

Each participant was interviewed on two occasions: once prior to commencing the Fire-setting Treatment Programme (by the author of this study and group facilitator/therapist) and secondly, on completion of the programme (by an independent psychologist). Interviews were conducted in the therapy rooms at the hospital, as these were familiar and comfortable for the participants. Prior to commencing the interview, all participants were fully informed about the study and had the opportunity to take more time to consider whether they wanted to participate in the study. Consent was re-visited prior to the second interview occurring and participants were reminded that they could withdraw from the research at any time.

Interviews began with the interviewer explaining that this was their account of the treatment programme and therefore there was no right or wrong answers. The interviews were audio-recorded. The interviews lasted between 25 and 80 minutes and this was dependent upon the manner in which the narrative was constructed and the length of account the participant wished to provide. Immediately following the interview, the interviewer offered the opportunity

for the participants to ask questions or seek support regarding the content of the interview. Notes were made following the interview in relation to the non-verbal communication displayed by the participant.

Interviews were audio-recorded and transcribed verbatim with all identifying information being removed during the transcription and pseudonyms were utilised for every individual whose name was mentioned during the interview. Each transcript included pauses in speech, emotional reactions such as laughter, or any other comments made in between questions. The non-verbal information was also inserted into the transcripts by the interviewer. Transcripts were constructed in a manner which allowed for extensive notes to be added during the analysis.

Data Analysis

Interpretative Phenomenological Analysis was used to analyse the data. The analytic process was informed by guidelines for ensuring quality in qualitative research (e.g. Spencer, Ritchie, Lewis, & Dillon, 2003) and the techniques advocated by the founders of the approach (Smith & Osborn, 2003; Smith, et al 2009).

In keeping with the idiographic nature of this research, the pre- and post- interview for each participant was combined and analysed in-depth individually. The transcript was read several times and initial annotations (thoughts and observations) were made in one margin. The process involved much reading and re-reading of transcripts with sections broken down and individual statements thoroughly examined in order to ‘make sense’ of what was being said. The second margin was used to note emergent themes, drawing on both the transcript and the initial analyses.

At this stage the emergent themes were listed and clusters of related themes were developed. These super-ordinate themes were constructed through a process of abstraction (putting like with like and developing a new name for the cluster), subsumption (where an emergent theme draws other related themes towards it), polarisation (oppositional relationships), contextuation (identifying the contextual or narrative elements within an analysis), numeration (frequency in which theme is supported), and function (Smith, et al 2009).

Once all five interviews had been analysed, the next stage involved looking for patterns across cases. This was achieved by drawing up a list of themes for the group, and clustering these into master themes representing shared higher order qualities. As there are multiple views of equal validity, investigator triangulation was utilised at this point to ensure the super-ordinate themes were as objective and meaningful as possible. This involved analysing the data collaboratively with a psychology colleague experienced in IPA analysis who had no involvement in the fire-setting treatment programme.

Validity and Quality.

Assessing the quality of qualitative research requires different criteria than those for assessing the validity and reliability of quantitative research (Barker, Pistrang, & Elliot, 2002). Smith et al (2009) recommends the Yardley (2000) guidelines for assessing the validity and quality of IPA research. Within these are four quality principles which included: Sensitivity to Context; Commitment and Rigour; Transparency and Coherence; and Impact and Importance.

In this study, 'sensitivity to context' was established through the demonstration of: sensitivity to the existing literature and theory within the introduction of this chapter, and the literature outlined in Chapter one and Chapter three; sensitivity to the socio-cultural setting of the

study through the descriptions of the participants and study context; and sensitivity to the material from participants through the manner in which the data was collected and analysed.

‘Commitment’ involves in-depth engagement with the topic and through developing competence and skill in the method used. Although I am a novice qualitative researcher, care was taken to ensure the study was conducted in a thorough and careful way by attending an IPA lecture, engaging in discussion with professionals who have also utilised IPA, and from my previous experience of using qualitative analysis within an MSc Research Project. This commitment is evidenced through my interview example (Appendix J).

Smith, et al. (2009) emphasises the importance of ‘transparency’ when writing up the research to ensure the underlying theoretical assumptions of the approach have been utilised. This has been highlighted through the audit trail in Appendix K. Yardley also includes the consideration of reflexivity within this principle, and a discussion of this is presented below.

The final principle of ‘impact and importance’ reflects whether the research informs the reader of something interesting and useful. Consideration of the clinical relevance of this research is outlined in the discussion section and later in Chapter Five.

Reflective Account.

Reflexivity involves reflecting on the impact of the researcher in the research process (Yardley 2000) and is particularly important in qualitative research. It is acknowledged that the beliefs and assumptions of the researcher may influence how they collect and analyse data, and whilst it is not possible to set these aside, it is important to be mindful of one’s own values and existing views through self-reflection.

Although traditionally, academic articles are written in the third person, the epistemological position of IPA requires qualitative researchers to own their own position (Elliot, et al., 2009). The use of first person allows transparency in doing so and will be used when appropriate throughout the remainder of this thesis.

I am a 33 year old British female raised in a working class area of Cardiff, South Wales. I have worked in the field of psychology for the past nine years with children and adults with challenging behaviour, mental health difficulties, learning disabilities, and personality disorder. Over the past six years, I have worked with offenders presenting with these challenges. I am currently a Trainee Forensic psychologist in my last year of training at the University of Birmingham, and I am working within a forensic low security hospital for males and females. My interest in working with offenders who have committed arson developed during the past three years when despite encountering a considerable number of these service users within secure services, I noted a dearth of literature in the area of mentally disordered fire-setters. I became increasingly aware and frustrated by the delayed developments in regard to understanding this client group and the development of treatment programmes, in comparison to other offender groups.

In terms of epistemology, I have described myself as coming from a social constructionist position, and I disagree with some of the tenets of Positivism and the exclusive use of scientific methods to enhance our knowledge about people and their experiences. I believe that knowledge is something that is defined by social groups, and therefore peoples' ideas and experiences are ultimately given meaning by the social context in which they occur.

Within my current placement, I have been encouraged to develop a structured fire-setting treatment programme for adults with mental health difficulties. To do this, I have invested a

considerable period of time reviewing the literature in relation to fire-setting, both in terms of the function of fire-setting, and the effectiveness of other programmes in helping individuals who have set fires. In terms of theoretical orientation I would describe myself as integrative and would acknowledge the influence of a wide range of models and theories on my thinking, including cognitive, psychodynamic, systemic, narrative, and constructivist.

Whilst the treatment programme has been developed with the aim of reducing future fire-setting amongst the clients that I engage with (and there are understandably external pressures to evaluate this using quantitative methods such as psychometric measures), my involvement in developing a treatment programme has influenced my personal interest in understanding how service users experience psychological intervention. This, in turn, has contributed to my decision to complete this current study.

RESULTS

Participants expressed a wide range of experiences during their involvement within a structured fire-setting treatment programme. The analysis yielded six super-ordinate themes and several sub-themes (Figure 6). The first theme addressed how participants viewed the relevance of specific treatment addressing fire-setting behaviour. The remaining themes represent central features of the participants’ experiences of treatment. Where possible super-ordinate themes were developed which were experienced by all the participants; however, this was not possible for the final theme of ‘Relating with Others’ as Louise received the structured treatment through individual therapy exclusively, and therefore did not experience group interactions. Table 7 highlights which themes were relevant to each participant. The referencing for illustrative quotes for each of the sub-themes can be found in Appendix L.

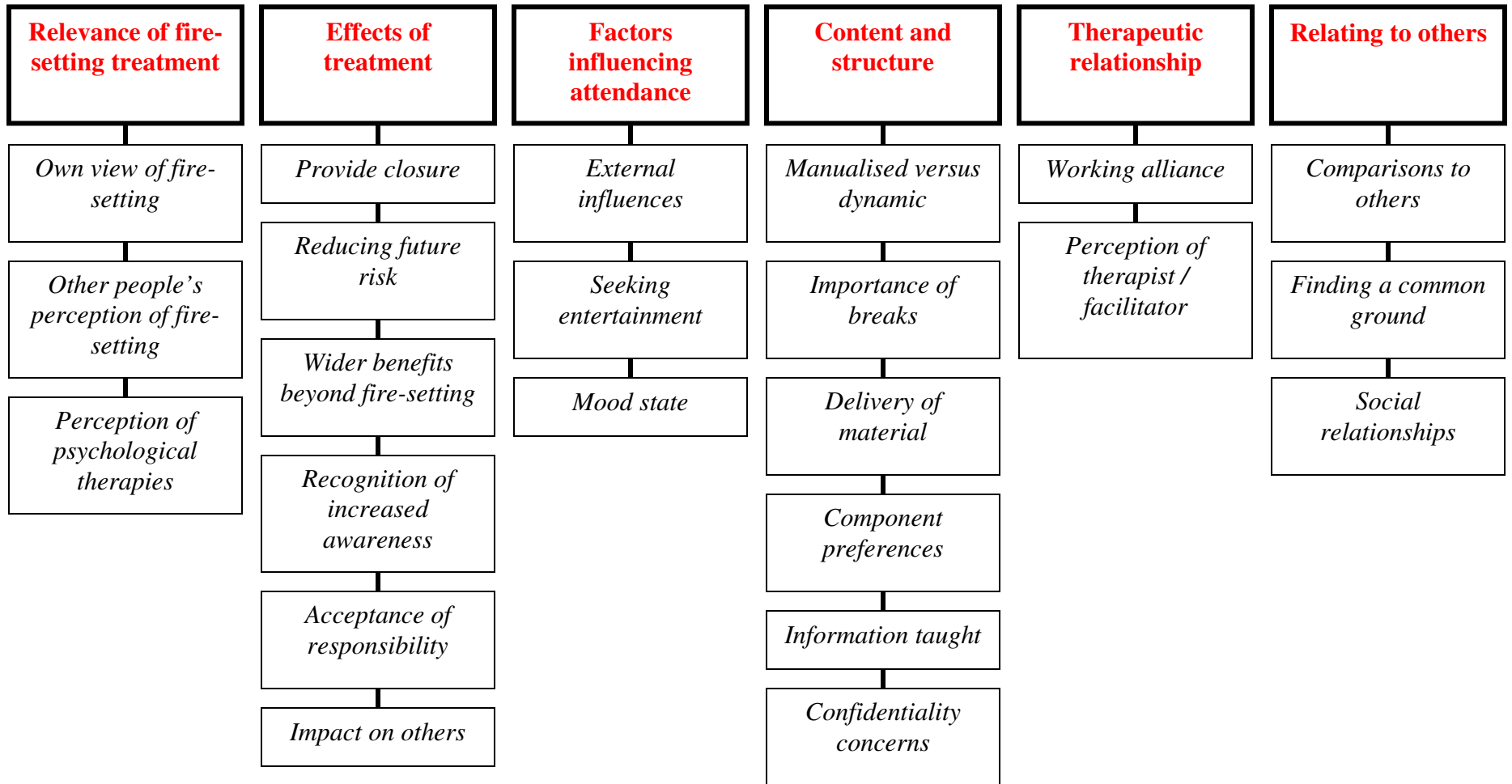
Whilst most sub-themes which made up the super-ordinate themes were consistent across interviews, a small number of sub-themes were unique to either the initial interview or the follow-up interview. Where this has occurred it has been noted within Table 7 by indicating whether the theme was present at either Time One (T1) or Time Two (T2), to fully inform the reader. Subsequent quotes related to the themes will be identified as occurring either during T1 or T2, to ensure clarity for the reader.

Table 9: Consistency of Themes

Themes	T1	T2
1: Relevance of fire-setting treatment	Matthew, Harry, Louise, Oscar, Steve	Matthew, Harry, Louise, Oscar, Steve
Own view of fire-setting	—————→	
Other people’s perception of fire-setting	—————→	
Perception of therapy	—————→	

2: Effects of treatment	Matthew, Harry, Louise, Oscar, Steve	Matthew, Harry, Louise, Oscar, Steve
Provide closure	→	→
Reduce future risk	→	→
Wider benefits beyond fire-setting	→	→
Recognition of increased awareness	→	→
Acceptance of responsibility	→	→
Impact on others	→	→
3: Factors influencing Attendance	Matthew, Louise, Oscar,	Matthew, Oscar, Steve
External influences	→	→
Seeking entertainment	→	→
Mood state	→	→
4: Content and structure	Matthew, Harry, Louise, Steve, Oscar	Matthew, Harry, Louise, Steve, Oscar
Manualised versus dynamic	→	→
Delivery of material	→	→
Importance of breaks	→	→
Component preferences	→	→
Information taught	→	→
Confidentiality concerns	→	→
5: Therapeutic relationship	Matthew, Harry, Steve, Oscar, Louise	Matthew, Harry, Steve, Oscar, Louise
Working alliance	→	→
Perception of therapist / facilitator	→	→
6: Relating to others	Matthew, Harry, Steve, Oscar	Matthew, Harry, Steve, Oscar
Comparisons to others	→	→
Finding a common ground	→	→
Social relationships	→	→

Figure 6: Relationship between Super-ordinate themes and Sub-themes



Theme 1: The relevance of fire-setting treatment programme

On discussing their experiences of the impending treatment and their involvement in it, all participants reflected on whether they perceived the treatment as something that was relevant to them. This was evident through their personal views of fire-setting behaviour, their reflections on themselves as fire-setters and on how other people view them, and their perceptions of psychological interventions (based on past experiences and their expectations of the current programme).

1.1 Own view of fire-setting

Amongst all participants was a reflection of whether fire-setting was something that was an 'issue' for them and therefore, something that required treatment, or whether treatment was not necessary for this behaviour. Matthew was the only participant that felt that fire-setting was not an issue for him and treatment was not relevant, as it was something that he had previously resolved:

'Um, I thought that, uh, I wasn't in the severe of the fire-setting group. I didn't think my experiences of it, uh, was really bad enough to warrant spending 16 weeks or 16 sessions, uh, having to go to the group. I feel, I just feel that the fires that I have set have been one-offs and 20 years ago, that, um, I didn't think it would be of any interest, because I've solved my fire-starting...I solved it now, it was in the past, it is something I wouldn't do again. I'm becoming more mature'. (Matthew - T1: L11-19)

However, three of the participants had different perceptions of themselves as fire-setters. Louise described how she still experiences difficulties in relation to fire-setting:

'Now that I'm living in the community and I still got fire thoughts. That's what I'm worried about' (Louise - T1: L29-30)

Whereas Oscar simply acknowledged the relevance of treatment by reflecting back on his past experiences:

'Didn't particularly want to do it first of all, but they say...well, I know I got into trouble for setting fires in the past, so...' (Oscar - T1: L20-21)

There were some conflicting opinions of whether the acknowledgement of self as a fire-setter indicated the necessity for treatment. Most of the participants acknowledged that fire-setting thoughts/behaviours were undesirable. For example, Harry made references to fire-setting being a 'problem' that he has and he anticipated treatment as:

'...hopefully sorting out the problem' (Harry - T1: L11)

Matthew, in contrast, felt that fire-setting was a solution to life's problems and was more reluctant to view it as a 'difficulty' or 'problem' that required treatment:

'Because I think that fire starting is a choice and not a problem' (Matthew – T1: L341-342)

'Fire-setting being a viable solution to my problems' (Matthew – T1: L73-74)

Two participants also reflected on whether fire-setting was something that was central to their mental illness. This may have been important when considering the relevance of fire-setting intervention within a hospital providing psychological treatment or medication specifically in relation to mental illness. Louise discusses the impulsive nature of her fire-setting and how her 'illness' interfered with her decision making around the time of the incidents:

'...cause when I lit that fire I wasn't very well, and I didn't know what I was doing...and I just lit the fire...' (Louise – T1: L209-210)

Similarly, Matthew also reported that fire-setting was part of his mental health difficulties around the time:

'I can't remember precisely what I was doing and what I was thinking of because in real life when I'm on a low, or lets say a balance of mood...I wouldn't even think about setting a fire. But when I was high it was an option, no problem at all. Option to set a fire and walk away probably very happy, no fear' (Matthew – T1: L201 – 205)

However, Matthew experienced a change in this perception through the course of treatment and he began to experience them as two separate issues:

'...got nothing to do with my mental health. You might argue the fact that I suffer with mood swings and so obviously I was on a low, but I think at the time, I was on...I was pretty level'. (Matthew – T2: L833-836)

1.2. Other people's perceptions of fire-setting.

How other people perceived fire-setting was an important theme relevant for three of the participants. The Responsible Clinician's (which in all cases was the Psychiatrist) encouragement to engage in treatment was experienced as influential when considering the relevance of fire-setting intervention:

'... [my responsible clinician] said it would be beneficial for me' (Louise - T1:L18-19)

The perceptions other people had regarding individuals who set fires, were also deemed important when considering the relevance of the treatment programme. These perceptions frequently had negative connotations for the participants:

'...some people think 'Oh you set a fire' they're dangerous people, and they belong in...they need to be locked up...' (Louise – T1: L293-294)

However, this same participant reported that that not all staff were overly concerned about fire-setting behaviour and its risks, as she reflected on her experiences within a previous community placement:

'I don't think they are really worried about me and my fire-setting thoughts, because when I lived in (previous community placement) I had unescorted, and I never picked up, or when I went to the shop I would never come back with lighters or matches, and when I was in (hospital) I would never come back with matches or lighters. I

remember one night I was having thoughts of fire and they still let me out in (previous community house)...’ (Louise – T1: L458-464)

1.3 Perceptions of therapy.

When considering the relevance of a fire-setting treatment programme, participants drew on their past experience and knowledge of psychological interventions. Prior to commencing this treatment, Matthew reported beliefs that therapy was pointless or would not impact him or others in any way:

‘It is a waste of time...Is it going to be therapy for us to magically change our views of using fire as a tool, as a means to an end?’ (Matthew – T1: L145-147)

‘I can’t see any benefit particularly for the people that attend’ (Matthew – T1: L210)

Oscar also questioned the utility of any therapy, by drawing on his past experience of engaging in therapy for depression, and how he continues to experience depressive symptoms:

‘Interviewer: Will anything change inside yourself?’

Oscar: Well I did work in the past on um, depression and I still get depressed so I don’t know

Interviewer: So...

Oscar: Well, I’ve done therapy before and I still get depressed

Interviewer: So are you making an association between the previous work and the outcome that you still felt the same way as you did before, and so this work...

Oscar: Well its therapy isn’t it?

Interviewer: So I'm clear, are you expecting that things won't change?

Oscar: I don't know. They might not. They didn't last time. Much. Well a little bit. I don't know. Maybe they will, maybe they won't. I don't know' (Oscar – T1: L197-209)

Harry recognized the wait for fire specific intervention, and experienced positive emotions prior to commencing the programme:

'It's been quite a long time waiting, so happy now' (Harry – T1: L20-21)

Participants may have drawn on this past experience of other interventions due to their uncertainty of what this treatment programme would involve:

'I don't know. Well obviously it's a group side and the individual side, um, I don't know. We talk about risks and things, and ...I don't know any more.' (Harry – T1: L49-51)

Despite this uncertainty, many participants had some expectations of the content prior to commencing the programme which may have influenced their perceptions on the relevance of the treatment to them:

'I suppose it will be why did you do it? How were you feeling? What were your urges' And things like that' (Louise – T1: L61-62)

'Well I know some reasons why I set fires, and I might learn some more'. (Oscar – T1: L186-187)

The focus on fire-setting behaviour caused some anxiety for Louise and Oscar who anticipated the potential re-emergence of fire-setting urges as a result of discussing fire-setting within treatment:

'...getting the urges again. I don't want to go down that road of getting the urges again...bad urges, wanting to set a fire, because at the moment they are just urges, not actions'. (Louise – T1: L10).

On completion of the programme, some participants made comparisons between the fire-setting treatment programme and other earlier experiences of therapy. Oscar identified the similarities he experienced between fire-setting treatment and Drug and Alcohol Counselling:

'We talked about stuff that affects my depression in drug and alcohol and she didn't really tell me anything I didn't know. And we talked about depression in fire-setting, it was more linked to the fire-setting, but I already knew that stuff. It was just different ways of talking about stuff I suppose. There were similar bits'. (Oscar – T2: L729-733)

However, Louise recognised some of the differences between treatment programmes by drawing on her experiences within Dialectical Behaviour Therapy:

'...because psychology wasn't focused on the fire-setting and this was. And my psychologist...was more based on coping skills for...self-harm, and things like that, not so much the fires. We did talk about it sometimes but not brought up all the time'. (Louise – T2: L513-517).

Two participants also reported on the importance that other people applied to the programme:

'It just blew my mind...how much importance was put on the course...' (Matthew: - T2: L498-500)

However, Matthew felt the importance that professionals held about the programme was misguided, and that they needed to gain greater understanding of the treatment when considering its relevance to him:

'I think that (responsible clinician) should go on it...because he ...blackmailing us into attending therapy which he knows nothing about...I think it's important for him to know exactly what he is doing forcing people onto a course that he knows nothing about' (Matthew – T2: L1152-1163)

During and following the treatment, four participants viewed the fire-setting programme as positive and relevant to them:

'...I found it helpful...' (Steve – T2: L503)

'I thought it was good and I thought I was finally getting some help' (Harry – T1: L4-5)

Two of these participants viewing the fire-setting programme as more favourable to previous treatment programmes or psychological input:

'When we did the anger management stuff we just focused on thoughts and stuff, coping strategies...there was more to this group' (Oscar – T2: L780-781)

However, for Matthew the programme was viewed in a contradicting manner, fluctuating between perceiving it as a useful relevant experience and viewing it as unhelpful:

'...if someone wants to take a lot of time, wasted time, in talking about fire-setting, it was the best way about it then' (Matthew – T1: L311-312)

'It did really touch home, hit a raw nerve' (Matthew – T2: L803)

Theme 2: Effects of Treatment

All five of the participants discussed their experience of how the treatment programme affected them in some area of their life. The effects of treatment were experienced as personal and immediate to themselves, potential influence on their future, and the impact on other people. These effects were not limited to fire-setting behaviours exclusively, as a number of participants also discussed wider effects that they experienced.

2.1 Provide ‘closure’.

Two of the participants talked about how they anticipated and/or perceived a sense of ‘closure’ from engaging in the treatment programme:

‘What am I expecting? Um, closure.’ (Louise – T1: L48)

This closure was described by both Louise and Harry as experiencing a sense of ‘moving forward’ with their lives:

‘...it might sort out the fire-setting so I can get on with my life...’ (Louise – T1:L109-110)

Equally, Louise described how she viewed fire-setting behaviour and thoughts as a ‘hurdle’ that she needed to overcome in the process of moving on with her life:

‘I suppose just getting over the fire-setting feelings and things’ (Louise – T1: L21-22)

Following treatment, Louise confirmed that her experience provided the ‘closure’ that she had hoped for:

‘...it made me talk about it and I don’t like talking about it, but I talked about it and it did lift’ (Louise – T2: L259-260).

2.2 Reduce Future Risk.

All five participants described how they anticipated and/or experienced reduction in their future risk of fire-setting. Harry described how this would be something that he anticipated achieving prior to commencing treatment:

‘...not getting into trouble again...lighting fires and that’. (Harry – L1: L138-140)

On completing the treatment, Harry goes on to describe his determination to refrain from fire-setting and how this compares to past commitments that he had experienced prior to treatment:

'...I don't want to get into trouble again...I had those sort of ambitions and that, but I wasn't so...committed to getting them...when I had a drink ...I sort of 'nah whatever'...' (Harry – T2: L786-795)

Similarly and despite Matthews' initial reservations about the relevance of the course for himself; he too reported experiencing a further commitment to reducing his future risk of fire-setting:

'I didn't think that I would ever use arson again anyway, but having therapy about it has just reinforced that. So it did do that.' (Matthew – T2: L970-972)

The experience of feeling prepared for the future was also identified in managing potential risk:

'Yeah, I mean if ever I was to have an urge again to light a fire...rather than to give in...deal with the situation the best way...practice the stuff I learnt in the group to not do it...'(Harry – T2: L147-151)

Louise identified specific 'hurdles' that she felt she could now overcome in the future in order to reduce her future risk:

'Yeah, I want to get a job...work in Tesco or Asda, fill my day up because I was bored you know sitting at home on benefits, I got bored. You think more then don't you? And I don't want to do that; I don't want to get back into that rut'. (Louise – T2: L438-441),

However, feeling prepared and aware of potential 'hurdles' did not necessarily indicate an immediate reduction in risk, as Oscar acknowledged that he had not applied this knowledge:

'I'm still not motivated to do much more activities now, but I can see why I did what I did' (Oscar – T2: L638-640)

'...I know in the future I'm going to have to do more...' (Oscar – T2: L657-659)

Three participants experienced their increased insight into the consequences of fire-setting as a key feature in reducing future risk. For Steve, the consequences that setting fires could have on his continued detention in hospital was a deterrent to future fire-setting:

'Just that it is not worth it...you just end up being locked up longer in hospital or other places...'(Steve – T2: L383-384)

This was a similar experience for Matthew who reported that he would abstain from fire-setting risk in order to avoid a potential prison sentence:

'The consequences I think was more important to me...five, ten years in jail is a path that I really don't want to go down' (Matthew- T2: L938-941)

Louise reported similar concerns, and went on to describe how she would use those thoughts as a deterrent when considering setting a future fire:

'...so in the future if I do get them thoughts I can narrow them down and think 'right this can happen' and then I could be in prison or back here for ages, so yeah its helped me a lot it has, doing this course' (Louise – T2: L253-255)

Louise was the only participant who experienced the potential consequences to *other* people as a deterrent for future fire-setting, and she described how her concern about causing injuries to either herself or other people has impacted her and her willingness to set future fires:

'Next time I get those urges I'll think 'oh if I do this, that this could happen or that could happen' and there could be serious consequences. Like someone could have died in the next flat to me...And that wasn't my intention for them to get hurt, but they could do. Someone could be in their flat and there is me and my fires, and I could injure them could it, or they might not be able to get out or something, and they could be stuck in the building. Anything like that could happen. And now its made me realise not to do that 'cause what could've happened with people and not just me, so I'm more aware of that, that it could hurt people, not just me or my animals, somebody could get seriously hurt, and that's not my intention for somebody to get seriously hurt' (Louise – T2: L189-201),

'...say if I had an urge, these thoughts will come into my head like people it could hurt, straight away they should come into my head, and I'll think 'oop hang on'. I'll

sit and think about it now... I'll think about the bad things that could happen rather than the good things, like... 'I want a fire I want to set a fire' so I need to think about what's happened...what the consequences are, not just me thinking 'Oh this is fun setting a fire'...' (Louise – T2: L213-221),

2.3 Wider Benefits beyond Fire-setting.

All of the participants experienced anticipating wider benefits beyond the fire-setting treatment. This included anticipating general benefits beyond fire-setting prior to commencing treatment:

'I don't know 100% what the groups about...it probably will be things in there that I can just use in general, rather than just with fire-setting' (Harry – T1: L155-156)

'Well, I expect to be more in control of the thoughts...' (Louise – T1: L99)

However, four of the participants anticipated benefits in terms of support to achieve specific goals, whether this was enhancing personal communication skills, arranging escorted leave, or getting discharged from hospital:

'Try to sort out leave and that'. (Steve – T1: L96)

Oscar described the benefits in relation to his increased time off the hospital ward; however, he recognised that this benefit may not have been a result of the content of the programme, but a result of his engagement in the programme as an 'activity':

'...it just got me off the ward more, which probably meant I wasn't getting into so much trouble on the ward because I wasn't bored which probably meant I got to go out more...but if I was going off to do another activity I probably wouldn't be bored'.

(Oscar – T2: L756 – 761)

Harry reported increased confidence in talking within social settings through his engagement on the programme:

'...sometimes...I'd get nervous a bit, like if you had to explain...maybe a past fire or whatever, I'd get nervous...I like didn't have much confidence in explaining things and that, so...sometimes my answers would be vague...but I worked on that and its not too bad now'. (Harry – T2: L905-910).

Four participants reported experiencing enhanced coping strategies through engaging in the programme, ranging from distraction skills, emotional awareness, to the importance of releasing tension. A particular coping strategy that emerged for Harry was the development of his assertiveness skills. Harry also experienced applying this newly gained skill within the programme towards the end of treatment:

'...well throughout the group...I was being passive and...I worked on that within the individual sessions as well...showing assertiveness skills...and instead of just sitting back and agreeing with everything, sometimes given my point over...' (Harry – T2: L420-425).

Of interest, Harry experienced the development of his coping strategies as one of the most important parts of the treatment:

'...the most important parts have got to be basically coping strategies...' (Harry – T2: L715-716)

However, not all participants experienced the will and motivation to apply the taught coping strategies:

'I still can't be arsed in getting involved in 'structured timetable' on the ward' (Oscar – T2: L647-648).

2.4 Recognition of Increased Awareness.

All of the participants reported experiencing an anticipation of, and actual increase of awareness of their fire-setting behaviour:

'Just basically have a better understanding about everything...' (Harry – T2: L336)

Participants experienced increased insight in relation to their understanding of the contributing factors, motivations, cognitions, and consequences of fire-setting, in addition to increased awareness into other issues involved in their fire-setting. However, only one participant anticipated gaining increased insight into what 'triggered' the fire-setting:

'...I never used to do it before, so I want to know why I started it now.' (Louise – T1: L50-51)

However, both Harry and Steve reported experiencing this increased insight during and following the treatment programme:

'...going through everything, doing the offence chain so I can see...I could picture...one thing leading to another...like the drink used to be a problem for me, and the other reasons why I used to set the fire...' (Harry – T2: L758-763).

Four participants reported enhanced awareness of what motivates people to set fires through the programme:

'...I did understand them more because...it brought it out to the surface what it was and why I was doing them, and that I was asking for help...' (Louise – T2: L423-425)

Steve, on the other hand, described how his experience of increased awareness was in relation to other peoples' fire-setting behaviour:

'...it just taught us why people set fires and perhaps how to prevent that in the future...more insight into why people set fires and what they hope to achieve out of it'.
(Steve - T2: L123-125).

All of the participants experienced increased awareness of the consequences of fire-setting. This was a particular feature for Louise who reflected in length on the increased awareness of the consequences to property and other people:

'I didn't realise people would have burns like that. I didn't even think about who it affects, like the family...the insurance...I didn't think of any of that. I just went and done it, didn't I?' (Louise – T2: L147-152)

Harry experienced increased insight into the legal implications of fire-setting, and the victims of fire-setting through the use of role-plays within the programme:

'Yeah, one of the role-plays we did was the...victims...and that went well...cause I could...identify ...how they would feel about certain things....doing the role-play and becoming each victim...and relating to how they would feel and what they want to say to someone who sets fires...' (Harry – T2: L555-563)

Steve, in comparison, experienced increased awareness of the financial and resource consequences to fire-setting:

'...just how dangerous it can be...there's a lot of risk and it cost people money, like the police force, the fire brigade...' (Steve – T2: L405-407).

Some participants identified potential consequences to themselves, particularly in relation to further detention within either criminal justice or mental health settings. Oscar was the only male participant that experienced increased awareness of risks to self:

'I remember watching one of the videos and it was showing the burns and how fire could travel through fumes and I didn't realise things like that, and that was really helpful, because I didn't realise that I could hurt myself' (Oscar – T2: L325-328)

In regard to cognitions, only Harry reported experiencing increasing awareness of his thought process in relation to fire-setting:

'...one of the things I used to say was 'Oh, it will be alright its only cars or whatever' but I can understand now that its not, it's a distorted thought you know, its trying to justify my actions...' (Harry – T2: L664-667).

Although most participants developed increased insight into the factors that may have contributed to his fire-setting including mental health difficulties and drug misuse, Oscar was the only participant that elaborated further on how some of these difficulties are paralleled in everyday life:

'...that's when I get more into trouble when I'm bored on the ward. I guess that's like my life really, that when I get bored or restless I'm more likely to set fires, and do other things that get me into trouble really. So that was good to learn'. (Oscar – T2: L322-325)

In contrast, Matthew reported experiencing no increased awareness of his fire-setting, frequently stating during interview that he had no memory:

'Well, it went in one ear and out the other so quickly that I can't recall anything'
(Matthew – T2: L315-316).

2.5 Acceptance of Responsibility.

Three of the participants experienced an effect in relation to their perceptions of responsibility for their fire-setting. This sub-theme was not identified by any participants during the initial interview prior to commencing the treatment. Both Louise and Oscar experienced acceptance of responsibility for their fire-setting behaviour. Oscar explained how he realised this had changed by engaging in a group exercise where blame is apportioned to particular individuals:

'...I remember at the beginning we did what we call a 'blame cake' and at the beginning I had a lot of...pieces or segments of that, which I would blame other people. I guess that changed a bit towards the end of the programme. I learnt more about...stuff that I did rather than blame it on other people...' (Oscar – T2: L311-316)

However, Louise experienced a struggle in accepting all the responsibility for her fire-setting behaviour, and continued to assign some of the responsibility to professionals involved in her care at the time of the incident:

'But I know I got to take responsibility for my actions, but she's got a duty of care to do something, didn't she? Put me in hospital or anything to stop that. Cause I could have hurt people' (Louise –T2: L450-453).

Matthew experienced taking responsibility for previous unknown fire-setting incidents by disclosing these within the programme, however, he described how he felt regret for doing this:

'...I could have kicked myself in the head. Why I brought it up. They came to me with a small incident of setting a fire...and I led them down the lane of that's not my most serious attempt...I have got this in the past...I admitted to something which I never have admitted to.' (Matthew – T2: L906-911)

Despite taking responsibility for unknown fires, Matthew described a sense of 'getting away' with his fires through the process of the programme:

'I thought I would be...held to account...but wasn't.' (Matthew –T2: L852-854).

Taking responsibility for fire-setting behaviour resulted in feelings of guilt for some participants. Louise reflected how she found this experience of guilt difficult:

'Well it's not a nice feeling, feeling guilty you know, that I could have hurt someone and that they didn't deserve it you know. They were just living their lives, minding their own business and there is me setting fires in the block'. (Louise – T2: L416-419)

2.6 Impact on Others.

In addition to participants experiencing effects of treatment on themselves, all of the five participants experienced the treatment having an impact on other people both in terms of their perceptions of the participants and their behaviour towards

them. The perceptions that other people held of them was frequently described as a belief that the participants were making an effort in relation to their fire-setting risk, and that they were ‘doing well’ in their efforts within the treatment programme:

‘it would prove that I was making some sort of an effort...to the facilitators’ (Matthew – T2: L512-513).

‘Kept saying ‘well done’ for taking part...’ (Oscar – T2: L719)

Oscar and Harry experienced that professionals and family were pleased by their involvement, regardless of whether this was just due to their engagement in a ‘activity’ or due to the perception that they were addressing their fire-setting behaviours:

‘They seemed pleased I was taking part in stuff’ (Oscar –T2: L716)

‘Well I think my parents and that will be happier, you know, that I’ve started to deal with the problem, more so than before...And I think that the doctor and the other staff will be pleased as well that I’m doing the fire-setting group’ (Harry – T1: L195).

This awareness of other people knowing that they were engaging in the treatment programme was anticipated to be beneficial to some participants:

‘...[my doctor] might trust me more, not that he doesn’t trust me, it just looks like I’m helping myself to get better, not dwelling on things’ (Louise – T1: L134-136)

'I think sometimes when you take part in the therapy...they are more willing to give you stuff in the MDT and in other meetings that psychology attends, social workers sometimes, OT and the psychiatrist, 'cause they can see you taking part in something, and they tend to be a bit more open-minded' (Oscar – T2: L666-670)

Furthermore on completion of the programme, Louise and Harry anticipated and experienced increased support from their clinical team and family in relation to their fire-setting:

'...people would think now, like social workers and CPN's, they would listen to me now...I'll explain to them what I'm afraid of, of burning people and who it effects, like family...and hopefully they will take notice this time if...say I need help. They will put me back in hospital or something'. (Louise – T2: L484-490)

'...I think it had a positive effect on...my parents always asked how I was doing with the group...you know give me support and just give me confidence and say 'Oh, you know, you're doing well'...' (Harry – T2: L878-881)

Only Matthew described his experience of the impact of treatment on fellow clients engaging in the programme:

'I was quite surprised with [one client] because he was one of the most anti-believers in the things that he done, and the things that they could do for him...I thought he would be more negative.' (Matthew – T2: L881-885)

Theme Three: Factors Influencing Motivation

Participants identified a number of factors that influenced their motivation to engage in the treatment programme. Four participants reported variables that influenced their motivation, and this was related to external pressures, seeking entertainment, and mood states.

3.1 External Pressures.

Three participants discussed how they felt pressurised to attend the treatment programme and how this impacted their attendance. Matthew was the only client that reported experiencing pressure as negatively influencing his actual engagement within treatment:

'I sulk like hell if someone forces me to do something I push against it. If [my responsible clinician] wants me to go right, I'll go left...if he's offering me...unescorted leave to do a course, I am going to do that course to the least of my ability, just to prove that I can do the course, but I'm not gonna...take any of it in. and that was the problem with the course. There were two people who were forced to do the course, for Gods knows what reason, and forced for 16 weeks to go through two hours of therapy and not want to have done it' (Matthew – T2: L1005-1014)

Matthew also experienced this 'pressure' as impacting another client, and reported having little insight into what may have influenced his Responsible Clinician's recommendation to engage in treatment in order to progress with his rehabilitation. Matthew described this experience as:

'...all little fishy with the hooks' (Matthew – T2: L994)

This encapsulated his experience of feeling 'caught' and not able to make a personal decision about his involvement as:

'myself and [other client] are with the Ministry of Justice and we can't do anything without [psychiatrists] support, without that we are not going anywhere' (Matthew – T2: L1000)

Oscar was less vague about who he perceived as providing the pressure and referred to the pressure coming from the expectations within the hospital environment:

'I had to really. Part of being in hospital.' (Oscar – T1: L8)

3.2 Seeking Entertainment.

Seeking entertainment was a sub-theme that influenced the motivation of two participants. Oscar reported being motivated to engage in the treatment programme as it was an 'activity' that would get him off from the ward environment for a few hours in the week. This was consistent for him during the initial referral to the programme, and during his engagement in the programme:

'I don't mind. It's getting off the ward. I'd be bored otherwise so it didn't bother me'.
(Oscar – T2: L488-489)

Oscar also reported after completing the programme that he experienced it as fun, stating:

'We had a laugh' (Oscar – T2: L437)

Matthew also anticipated enjoyment from the course, in terms of humour:

'...have a little bit of banter...' (Matthew – T1: L225)

However, he goes on to describe how despite these intentions, he experienced the course as more serious than he had hoped for:

'...so for me it was an opportunity to have a laugh with other people, but it didn't seem to happen though, they were taking it quite seriously'. (Matthew – T2: L586-588)

3.3 Mood State.

The participants' emotional state also impacted their motivation to attend the treatment, and in particular the group component:

'It dragged now and again, just if I was in a bad mood, I don't want to come. So it was kind of a bind going then' (Oscar – T2: L495-496).

Theme Four: Content and Structure

This theme encapsulates how all the participants experienced the content and the structure of the fire-setting treatment programme. Participants discussed their experience in relation to the structure of the treatment (i.e. manualisation,

components, and breaks) and the content of the programme (i.e. content delivery, confidentiality concerns, information taught and understanding of this information).

4.1 Manualised vs. Dynamic.

Some participants reflected on their experience of their programme being ‘manualised’ as opposed to each session being completely dependent on the content raised by the service users. Matthew’s awareness of the treatment being a ‘structured’ programme raised concerns for him prior to commencing the programme, and following treatment he elaborated on this by describing how the structure was represented in the set sessions and topics delivered:

‘...it’s all a set programme isn’t it. It’s from a book probably, and they just went through the motions of the book. It was exactly the same as CBT...where they play the role of the therapist, and someone decided ‘right we are going to have ten sessions of this group and we are going to go through each of these topics and then we are going to...’...there is a start, middle, and an end’. (Matthew – T2: L390-397)

Matthew viewed this in comparison to a more dynamic approach where he perceived therapy as evolving based on the information brought by the participants involved in treatment:

‘It should be structured around the input of the people involved in it’ (Matthew – T2: L457-458).

Despite these perceptions of the structure of the programme, Matthew reported that he experienced benefits because of it:

'I think a lot of the way they structured it, did bring it home to me' (Matthew – T2: L777-778)

Oscar offered another perspective to the structure, as he experienced the session timetable as helpfully predictable:

'Um, it was good, it was structured and I knew what I was doing so there were no surprises particularly' (Oscar – T2: L771).

4.2 Delivery of Material.

All of the five participants described their experience of the delivery of material making reference to the various methods utilised by therapists and facilitators, including: visual prompts; talking exercises; team exercises; reading and writing; and homework. This variation in the delivery of material was not something that was discussed and/or anticipated by any of the participants prior to commencing the programme.

Harry, Oscar, and Matthew all discussed their negative experiences of the reading and writing exercises within the programme, frequently viewing it as either difficult for them or less likely to help them remember the point being discussed:

'I don't know but sometimes when I read things I miss, I like miss words out or put a word in and that, so...I didn't do anything wrong when I was reading it was just like a case of 'Oh, I hope I don't mess up here in front of everyone' you know' (Harry – T2: L610-614)

Anything written down was just so easily forgotten' (Matthew – T2: L718-719)

However, reading and writing was experienced as beneficial in some circumstances:

'Well I used to write notes, written down notes of what was going on...from the board...so it would help me remember...yeah, I found that useful as well to remind...'

(Harry – T2: L342-344)

'It was interesting...reading about other people and why they done it, and what the outcome they had after that...' (Steve – T2: L200-201)

Homework (which was delivered in written format) was also perceived unfavourably by both Oscar and Steve, who both experienced difficulty in remembering to complete these set tasks, and would relate these experiences to school. Oscar describes how the implementation of an extra written exercise (as homework) to explain non-attendance was aversive, and encouraged increased attendance as a means to avoid this work:

'Writing down why I didn't want to go what was I thinking what was I feeling. If I turned up I didn't have to do that' (Oscar – T2: L823-825)

Both Oscar and Harry reported that the varied techniques for delivering information were a positive experience to 'break up' the monotony of written exercises and to enhance interest amongst the group:

'Doing the activities to sort of break up so much of the written stuff as well, that was good' (Harry – T2: L579-582)

'They used lots of different ways. Made it more interesting'. (Oscar – T2: L506)

The team exercises were perceived as easier amongst some participants:

'As I said what with using the exercises and that it was sometimes an easier way to show how things can link together and that...' (Harry –T2: L372-373)

Oscar also reported finding these exercises as helpful as he perceived himself as enjoying more practical activities as a way of promoting thinking:

'...I found the activities the most helpful because they kept me occupied...I like doing stuff, getting my head going and my brain to warm up...' (Oscar – T2: L319-320)

Visual prompts were used such as media examples and photographs of burns. Oscar experienced both of these approaches as unnecessary for him, as he didn't perceive the media examples as relevant to his own fire-setting, and he felt that seeing burns had not contributed to his knowledge due to seeing these previously on television:

'there was one bit when we saw pictures of peoples scarring and stuff...I knew people could get burnt, I've seen...burns on Holby City...and it didn't help me at all'. (Oscar - T2: L551-555).

In contrast, Louise described the photographs of the burns as unexpected and an 'eye-opener' (T2: L142) for her:

'...I knew I had to talk about fires and things, but I didn't expect the pictures' (Louise – T2: L393)

4.3. Importance of Breaks.

Three participants experienced the 'breaks' within the group component as important for them in order to get a drink, have a cigarette, or enhance their concentration. Steve described how a break in the middle of a two hour group was helpful for him:

'It was two hours and we had a break in between which was helpful so we could have a fag and drinks, yeah it was fine' (Steve – T2: L265-266)

He also mentioned how the availability of a break in the hospital café proved to be a motivator in his attendance at times:

'...the café breaks...coffee and cigarette break...just gave me more incentive to come, perhaps if I was having a stressed out day or whatever'. (Steve – T2: L483-488)

Matthew felt that the breaks were essential in maintaining his concentration, and questioned the reason for having only one scheduled break within the two hour session:

'if a human beings memory and concentration only lasts twenty minutes, why was it done over an hour or plus an hour?' (Matthew –T2: L1135-1138)

4.4. Component Preferences.

Preferences for either the group or individual component of treatment were experienced by all participants who engaged in both elements. Prior to commencing the treatment programme, some participants experienced uncertainty about what the group component involved:

'I never been in a group with other people doing therapy before, so I'm not really sure what to expect' (Oscar – T1: L114-115)

On anticipating the group, Harry described how he feared embarrassment if he had to share one of the motivations behind his fire-setting within this setting:

'the reasons why I set the fire...the sexual reasons...I didn't want to mention stuff like that in the group because ...I would have been embarrassed...' (Harry – T2: L523-525)

However, with the reassurance that this could be discussed within individual sessions Harry reported:

'I didn't have a problem speaking in front of the group' (Harry – T2: L512)

Discussing sensitive information within 1:1 sessions was more comfortable for Harry, although he recognised some discomfort:

'still not 100% comfortable talking about it, but...I can deal with it okay speaking just like 1:1...without having...an audience within the group' (Harry – T2: L541-544)

Harry also reported how he found the 1:1 environment more relaxed which was something that was shared by Oscar:

'God that was kind of more relaxed. Well I found it relaxed in individual sessions'
(Oscar – T2: L379-380)

Experiencing a relaxed environment was also dependent on the small numbers within the group for Steve:

'...it was easier to relax and that, the atmosphere wasn't as tense as if there was lots of men' (Steve – T2: L375-276).

Oscar experienced the 1:1 sessions as beneficial to discuss more personal issues, such as information with an emotional content, and he experienced a preference for these sessions:

'There are other group members...it's alright, but 1:1 time is good for me' (Oscar – T2: L384-385)

Matthew also described this preference for 1:1 sessions, but also suggested that the topic of fire-setting may not be suitable for group treatment:

'...because it is such a serious, uh, subject matter, isn't it? It is really. To make it into a group, I just don't think it works'. (Matthew – T2: L542-543)

4.5 Information Taught.

All participants anticipated particular topics that would be involved within the treatment and expressed their experience regarding the breadth and depth of these topics. Steve was the only participant that anticipated that the information taught would be exclusive to fire-setting:

'Just talking about fire-setting and that...just fire-setting...why people set fires and that'. (Steve – T1: L37)

In comparison, Matthew anticipated a *'...lot of information thrown at [them]'* (T1: L108-109) and later went on to describe how the amount of information covered within the sixteen week programme, was experienced as an overwhelming amount:

'it was just too much, absolutely too much' (Matthew – T2: L784)

Matthew also felt that this was related to the detail of this information (and not just the quantity of topics) and he experienced the information as *'over-complicated'* (T2: L602) and that the number of sessions provided were unnecessary:

'...everything was long winded. I think a fire starting group like that could be done in an afternoon'. (Matthew –T2: L374-376)

Similarly, Oscar experienced the programme could be *'repetitive at times'* (T2: L527).

Harry also acknowledged the quantity of the topics covered within the programme, however, in comparison to Matthew, Harry described each topic as important and necessary within the treatment:

'Covered pretty much everything...it's a good thing, it gives me good understanding of...everything from ways of coping, knowing what could be a problem for me, ways to cope...doing all offence chains, being a victim role-plays, identifying victims, uh, different types of...punishments for setting fires and how the court would see...different things that contribute to having a bigger sentence...it was quite a lot to be honest...it was a lot in the group but...each one had its own benefit in it' (Harry – T2: L617-626).

Despite the quantity of information, four of the participants reported that they understood the information taught within the programme. Matthew was the only participant who reported difficulties in understanding the topics, and described the experience as similar to school in that the information went *'straight over his head'* (T1: L36). Despite this, Matthew did experience parts of the course as *'quite informative'* (T2: L932). In comparison, Harry and Louise described how the facilitators/therapists helped enhance their understanding:

'It was in a way I could understand, it wasn't patronising or anything like that...'
(Harry – T2:L406-407)

Similarly, Oscar experienced the group exercises as a technique that enhanced his understanding of the information taught:

'...the hands on was really helpful...and looked at other people's fire-setting and why they did it, it was easier, well I found it easier anyway' (Oscar – T2: L512-513)

For one participant these approaches caused more confusion for him at times, but this was overcome by seeking support from the facilitators:

'Most of it I pretty much understood, some of the ...exercises I was writing down some stuff...I wasn't 100% sure but I asked the facilitator and that was explained then, and then I found it okay to do' (Harry –T2: L679-683)

Matthew however, didn't experience a connection between a number of the practical exercises and fire-setting:

'I didn't think that knocking dominoes had anything to do with me lighting a bin, or to set an office alight. I didn't think there was no connection there at all' (Matthew – T2: L663-665).

4.6 Confidentiality Concerns.

Concerns over the confidentiality of the service users' fire-setting behaviour was a sub-theme for three of the participants in the programme. The concerns of confidentiality were related to information being shared with other service users within the programme, with the other service users living on the ward with them, with professionals involved in their care, and the police.

Issues related to confidentiality were more frequently experienced prior to commencing the programme when the participants pondered the outcome of detailed

disclosures in relation to past fire-setting. Matthew's main anxiety was in relation to police or the Ministry of Justice extending his section under the Mental Health Act as he had never talked in detail about past arson incidents:

'My only worry is that the police would get involved, or anybody who could, who could extend my stay here because I got fire-setting as a problem. That's what I'm quite nervous about...' (Matthew – T1: L33-35)

Matthew and Oscar also experienced apprehension about information of the programme 'leaking' onto the ward, and other clients not engaged in the treatment becoming aware that he was a 'fire-setter':

'People taking information out of there, using it on the ward' (Oscar - T1: L148-149)

Although Matthew anticipated *'a little bit of stigma'* (T2: L1064), he did not experience this occurring when other clients became aware of the programme. Oscar reported that the purpose of the treatment programme remained confidential, and therefore he did not experience any difficulties. Oscar described how the other participants in the programme maintained this confidentiality due to the group rules devised at the start of the programme and potentially due to their own anxieties about other members sharing their personal information:

'...one of them on the ward with me. That was the only problem. I was a bit worried beforehand...talking about stuff that I don't talk about with other guys on the ward, and one of the guys on the ward would be there and hear all my personal stuff so...he

would open his mouth and tell other people or staff...well we agreed to confidentiality at the start, and I had stuff on him. I knew as much about him as he did about me.'

(Oscar - T2: L472-279)

Harry was the only participant who experienced concern about confidentiality within professional meetings, particularly in relation to his Care Programme Approach (CPA) meeting which his parents had attended and a progress report from the treatment programme was submitted. Harry described his experience of this meeting and how the confidential content was managed within it:

'...although my parents have a sort of understanding of why I set the fire, I didn't want them knowing too many details and that, but that was kept to a minimum, the details I didn't want them to know was kept to a minimum so that was okay' (Harry

T2: L827-831)

Theme Five: Therapeutic Relationships

The therapeutic relationship was a main theme for all participants when describing their experience of the fire-setting treatment programme. This relationship was described in relation to the working alliance (the interaction between facilitator/therapist and the participant) and the perceptions of the therapist/facilitator (as an individual).

5.1 Working Alliance.

The working alliance was identified as a part of the experience for the five participants. Prior to the treatment, the working alliance was related to what the

participants felt was important within the therapeutic relationship. Both Louise and Harry described how feeling supported would be part of the relationship between participant and therapist/facilitator. Both went on to describe following the treatment their experiences of being supported by their therapist within sessions:

'Support me through it...' (Louise – T2: L241)

Louise also experienced feeling accepted by her therapist and how this provided a different type of relationship to one which she has experienced with some people:

'didn't judge me which is a good thing cause some people do don't they? Judge'
(Louise – T2: L316-318)

Similarly, Oscar made comparisons between the working alliance between himself and his therapist to his relationship with nursing staff, indicating how feeling accepted and understood was something differentiating the different therapeutic relationships:

'I get on really well with my therapist. A lot of people on the ward think I'm dangerous and don't really have much patience with me to be honest. But [my therapist] does tend to understand why I do some things I used to so, and don't judge me for it' (Oscar – T2: L403-407).

Matthew also experienced this as an important part of the therapeutic relationship and recognised how this may impact the participants' ability to be open and truthful in the programme. Matthew felt that this was essential in order to enhance the benefits of therapy, and indicated the need for reassurance from the facilitators/therapists prior to commencing the programme:

'you need to create an environment in which people can be honest and feel non-threatened by it. I think that will be the job that will be the most difficult. Otherwise we will just all walk away after the 16 sessions without gaining much at all, because everyone has clammed up' (Matthew – T1: L180-184).

Matthew later described how he experienced the group environment as relaxed:

'Kind of relaxed. Bit of humour at times' Matthew – T2: L550)

This relaxed atmosphere was also experienced within the individual sessions by two participants, and Oscar described how this was related to his therapists' understanding of his difficulties:

'Well I could sit back and relax and talk more in my individual. Again, my therapist would understand why I do what I do, don't feel criticised, that's nice' (Oscar – T2: L382-384)

The working alliance was experienced within a professional review meeting for one participant, when she requested to continue her treatment in a community house as opposed to continuing her detention in a hospital setting:

'...[my therapist] told the meeting that I could still do the fire course out in the community, she could have said 'No you need to be in hospital for God knows how many months, years or whatever'...and...she didn't...label me with the tag that 'she's no good cause she set a fire'. She believed in me I think. That I could do it. That I could do these things'. (Louise – T2: L295-300)

Inherent in a working alliance is collaborative working (e.g. Wills & Sanders, 1997). This was experienced by three of the participants who described the sharing of information and the collaborative approach to managing challenging content of the sessions:

'she went through [my CPA report] with me before. She always did that' (Oscar – T2: L683)

'...but now I've spoken to [my therapist] and we will agree to, not stop it but...monitor it. It's put my mind at ease' (Louise - T1: L6-7)

Furthermore, the working alliance offered the ability to resolve interpersonal difficulties within the relationship, and allowed for non-collaborative behaviours to be addressed directly within sessions:

'[My therapist] could usually tell when I was pissed off. We would talk about it' (Oscar: T2: L418-419)

'I had therapy before and I haven't turned up the next session I go in we just carried on as normal. But with fire-setting we had to look at why I didn't go and what I could have done differently, setting up prompts and things like that to remind me...there were some helpful ideas as well...came up with ideas of how to make it more like I could go' (Oscar – T2: L804-820).

5.2 Perceptions of Therapist/Facilitator.

During the period of impending treatment, three of the participants anticipated how the therapist/facilitators would be during the programme. Oscar anticipated that the facilitator would be a rule enforcer based on previous experience of other staff managing his behaviour with other men on the ward:

'me and the lads would take the piss and so often get told off a lot...and I'm guessing it may get a bit like that' (Oscar – T1: L123-125)

During the treatment, Oscar experienced a change in opinion and stated that he *'expected some criticism for setting fires but no [he] didn't get any of that'* (T2: L593-594). However, Oscar did acknowledge feeling angry at his individual therapist for discussing his non-attendance at the group component:

'She pissed me off sometimes' (Oscar T2: L416)

Matthew felt that the facilitators and therapists would be inexperienced in relation to fire-setting and would not be able to relate to the topic at hand:

'fucking hell you don't know what you're talking about. We come from two different worlds' (Matthew – T1: L226-227)

However during the programme, Matthew experienced the facilitators as *'accomplished'* (T2: L708) which was consistent with Louise's experience within the programme and how the role of facilitator/ therapist compared to other staff in the hospital:

'cause when I talk to the nurses, I think, they don't really know...but when I talk to [my therapist] I think [my therapist] knows about fires and I find it helpful...' (Louise – T1: L260-262)

Steve experienced the facilitators as *'friendly, outgoing, polite'* (T2: L232) but prior to commencing treatment he expected them to be 'assessing' him during the treatment, implying a perception of the facilitator/therapist as 'expert' doing things to him as opposed to collaboratively with him:

'Just to assess why I done things, assessing why I set fires and that'. (Steve – T1: L171-172)

A similar experience was described by Matthew prior to treatment, as he perceived the role of the therapist was to assess whether he was gaining information from the programme:

'...it will just be analysing us for what we've taken in, or on board, from the main sessions...' (Matthew – T1: L121-122)

Theme Six: Relating to Others

All participants that experienced the group component of the treatment programme contributed to this super-ordinate theme. This theme represented how participants related to the other group members and whether this changed through the course of treatment. Areas of relatedness included contributing to others, finding a common ground, and the development of social relationships.

6.1 Contributing to Others.

The four participants involved in the group component of treatment experienced a sense of contributing through their involvement in the programme. In most cases this involved contributing to other members by providing their own experiences in the hope that it would help them with their personal difficulties:

'...perhaps there were other people that done the same thing...to help and prevent them doing that' (Steve – T1: L184-185)

Oscar was the only participant who described how others' participation in the programme contributed to his own understanding and development:

'...when we doing chains on other people you kind of see it better. It was harder when we did it on me. It is easier to see why somebody done something. We did these sort of scenario things, the room set up like a courtroom and we had to give a sentence...I found doing that easier. So it was kind of easier with the other guys in the group as well' (Oscar – T2: L458 - 463)

6.2 Finding a Common Ground.

Finding a common ground was experienced by all the male clients even before the programme commenced. This was often experienced as sharing similar understandings in relation to fire-setting, despite the differences between them in regard to motive and contributing factors:

'I know we all got different reasons for lighting fires and that but...you can sort of share experiences...' (Harry – T2: L450-451)

This sharing of experience was recognised by both Steve and Harry as supportive and reassuring:

'Just talking to people do it as well and so I know that I am not the only who has been thinking that way...and I'm not the only one who has ended up on section because of it...' (Steve – T2: L505-511)

6.3 Social Relationships

Only two of the four participants within this theme anticipated the development of social relationships prior to commencing the treatment:

'There might even be friendships there...' (Matthew – T1: L113-114)

Matthew experienced the relationships within the group as *'pretty positive'* (T2: L561) and described how in one case he developed a new relationship within the group:

'...I got to know [one client] a lot more so that was a bonus point...' (Matthew – T2: L557-559)

Harry also experienced this development in peer relationships through the programme, but identified this as short-lived following the completion of treatment:

'I don't really see them very much cause they all live on other units anyhow...' (Harry
- T2: L874)

Steve also anticipated *'meeting new people'* (T1: L23) and experienced social relationships outside of the group setting:

'I used to say hello to [one client] if I was passing by...' (Steve –T2: L455-456)

In contrast, Oscar experienced indifference to the other clients on the programme, and didn't report any social relationships as a consequence of the treatment:

'Didn't particularly like anyone that much or dislike any of them' (Oscar – T2: L436).

DISCUSSION

'It's been quite a long time waiting so happy now' (Harry – T1: L20-21)

In this study, service users provided detailed and complex descriptions of their experience of a fire-setting treatment programme. Their accounts were characterised by their reflections on themselves as fire-setters, their fire-setting behaviour, and the perceived benefits and weaknesses of the treatment. Although participants varied in their views, they all described how they experienced the programme as beneficial to them, either in terms of their personal development and/or its impact on other people. A central experience described by participants was whether they felt the programme was relevant to them, based on their perceptions of themselves as 'fire-setters' and the appropriateness of fire-setting behaviour. This experience of the 'self' was a theme identified by Ritchie, Weldon, Macpherson, and Laithwaite (2010) in a qualitative analysis of mentally disordered patients' experiences within a drug and alcohol treatment programme. Participants' perceptions of fire-setting behaviour appeared to be consistent with the conflicting opinions within the literature of whether fire-setting behaviour should be treated directly as opposed to only treating the mental disorder or psychological difficulties that may contribute to its occurrence (as discussed in Chapter one). It is likely that the participants differing perspectives on themselves as fire-setters, and of fire-setting behaviour, is influenced, in part, by how professionals and services respond to their offending behaviour, in comparison to their different offending behaviours and/or the offending behaviours of others.

The experience of the 'self' appeared to have implications in relation to treatment benefits. The results suggested that those participants that identified fire-setting as a problem for them, were more likely to describe the programme as a

benefit, as opposed to the participant who described feeling pressured to attend by an influential member of his care team. However, the qualitative phenomenological approach did not allow a systematic investigation of this.

One of the experienced effects of the treatment for all participants was the recognition of increased insight into their fire-setting behaviour. Furthermore, some participants described how they experienced increased insight into the consequences of fire-setting (to themselves and others) as a central reason for not engaging in future fire-setting behaviour. This lends support to the utility of developing specific fire-setting treatment programmes (e.g. Swaffer, et al., 2001) in order to enhance knowledge of fire-setting, as opposed to utilising more generic treatment approaches (e.g. Rice & Chaplin, 1979). In line with this, Geller (1992) advises that treatment should provide exposure to fire-related stimuli, and education about fires. Juvenile offender programmes have long addressed this specific need of fire-setters by incorporating fire-related topics such as fire safety education into therapeutic interventions (e.g. Birchill, 1984).

A central aim of a treatment programme for fire-setting is, of course, reducing future recidivism. All participants in this study reported a perceived reduction in future fire-setting risk, and described how they felt more prepared for the future challenges they may encounter. However, participants also highlighted how the treatment programme provided benefits beyond reducing risk, such as through the development of generalisable coping skills. This is consistent with previous research indicating the benefits of generic treatment programmes for individuals who set fires, both in terms of reducing future fire-setting behaviours, and in relation to improving skill deficits (e.g. Rice & Chaplin, 1979). It indicates the importance of modular

interventions which not only enhance insight into behaviours but provide an opportunity to develop alternative coping strategies (Geller, 1992).

This experience of reduced risk of recidivism by all participants questions the perception that a structured group intervention is not suitable for the heterogeneous nature of fire-setters. Although this study focused exclusively on a sample of mentally disordered fire-setters, the psychiatric diagnoses and motives for fire-setting behaviour were heterogeneous. To incorporate the many psychological needs and potential deficits of this client group, the fire-setting treatment programme incorporated a range of coping strategies and approaches. Although the breadth of information was recognised by all participants, the majority of the participants reported that these were all relevant or beneficial despite their differences. Participants may have found all areas beneficial (even those which may not have been relevant to their own personal fire-setting behaviour) as it may have consolidated or enhanced previously gained insight and coping strategies. Only one participant made reference to the structure of the programme as unnecessary (but informative), with other participants experiencing it as useful. This is consistent with other service users' reported experiences of finding the structure and guidelines within a Dialectical Behaviour Therapy Programme as helpful (Araminta, 2000). Similarly, offenders within a sexual offender treatment programme described the importance of structure in providing a clear routine, and it is posited that this enables them to recognise that staff actions were meaningfully related to the goals of treatment, as opposed to their own personal agenda (Drapeau, 2005). Of interest, the participants' preference for the structured, manualised treatment within this programme may reflect the variation within the psychiatric diagnoses and presenting issues within the group. For example, individuals with Aspergers Syndrome may have a preference for the predictability and

routine it offers (Beebe & Risi, 2006). This was consistent with 'Harry's' positive experience of the structured timetable provided in the initial sessions, as this reduced the uncertainty of what the group would involve each week. On the other hand, individuals with Antisocial Personality Disorder, with the diagnostic traits of failure to conform to social norms, impulsivity, and failure to plan ahead (APA, 1994), may perceive the same structure as restrictive and find it difficult to adhere to the rules within it. Consistently, throughout the interviews, 'Matthew' verbalized his dislike of the structure and reported that he would have preferred the sessions to be dependent on what the participants wanted to discuss as opposed to being planned in advance.

Participants also described their experiences and preferences for different approaches in the delivery of information, describing different views on which were more effective to aid memory, concentration, and understanding. Individual learning styles are well recognised in the literature (e.g. Honey & Mumford, 1995) and are likely to be influenced by age, maturity, literacy, and educational experiences. McGuire (1995) indicates that interventions tailored to learning styles are most likely to be effective. This is consistent with Andrews and Bonta's (1998) three principles for the effective treatment of offenders, specifically the 'responsivity' principle. This principle advises that treatment is adapted to fit the ability and learning style of the client, and programmes that adopt this principle are identified as most effective (Bonta, 1995). Therefore, variety in the delivery of information is an important consideration within any group intervention for any client group.

The participants, who engaged in treatment primarily through group intervention, described the benefits of having individual sessions to support them through the programme and provide a safe, relaxed environment in which more personal issues could be explored. This dual modality approach has been adopted

within previous fire-setting treatment programmes (e.g. Swaffer, et al, 2001) and within other treatment programmes for adults with personality disorder (e.g. Dialectical Behaviour Therapy: Linehan, 1993). However, this is not to dismiss the importance of the group setting as all participants expressed some views of finding this helpful. Fellow clients reduced feelings of isolation, provided a sense of being understood, and an opportunity to contribute to the growth of others. This is consistent with detailed research demonstrating the benefits of support from 'similar others' (e.g. Todd & Bohart, 1999; Williams, et al., 2011) and the benefits of sharing experiences and company amongst other fire-setters (e.g. Hall, Clayton, & Johnson, 2005). However, disclosing information in front of fellow clients also raised concerns about confidentiality, and feelings of anxiety when discussing personal issues. This may have contributed, in part, to the elevated anxiety scores for four of the participants when assessed using the MCMI-III pre-intervention. Furthermore, participants may also view group intervention as an opportunity to engage with other clients, and spend time away from their daily inpatient environment (as opposed to engaging with the motivation to change). This raises the question of whether motivation to reduce fire-setting behaviour is a necessary prerequisite to treatment, or whether fire-setting treatment programmes within an inpatient setting could benefit from a motivational module or element. Such a solution, however, may not be essential given that participants described gaining insight and a reduction of risk regardless of their initial motivation for attending the group.

The therapeutic relationship was a key issue arising in the participants' accounts. The value of being supported and understood by the therapist/facilitator is of central importance in psychological interventions (e.g. Glass & Arnkoff, 2000; Martin, Grasse, & Davis, 2000). This may be even more important when treating

offenders who frequently anticipate being 'judged' and 'alienated' from society at large (e.g. Marshall & Serran, 2004). The emphasis of the 'Good Lives Model' (e.g. Ward & Stewart, 2003) within the programme may have enhanced this perception of feeling accepted by the therapist/facilitator, given its emphasis on building strengths as opposed to focusing solely on risks. Collaboration was also recognised by participants as beneficial during the intervention, although participants continued to experience the facilitators as the 'expert' at times, possibly reflecting the structure of the group intervention and their dual role as teacher/therapist. Equally, this could have been related to the participants' experience of the therapist/facilitator as knowledgeable, which may have some positive implications on treatment. Drapeau (2005) reported that offenders assessed the quality of sexual offending treatment on their perceptions of the therapist's competence.

The findings of this study must be considered in the light of a number of methodological issues. The study is based on a small number of mentally disordered offenders from one forensic inpatient unit; therefore, the generalisation of findings should occur with caution. The methodology chosen for this study fitted with the aims of the research, resulting in a rich, complex, and rigorous account of mentally disordered fire-setters experiences of a treatment programme. IPA is an idiographic approach, and therefore this study does not purport to be generalisable to all experiences of fire-setting treatment, but it does aim to offer a contribution to a relatively unknown knowledge base (Smith & Osborn 2008). While other offenders may have similar experiences of therapy, it should be highlighted that this study offers the salient themes from five participants and therefore the transferability and generalisability of the findings should be considered within that context. Despite striving for trustworthiness and clarity of the process of analysis, the nature of this

methodology is such that the results are my interpretations of the data and others may have found different themes more salient.

Further exploration of offenders' perceptions of fire-setting treatment programmes and more generic programmes in addressing some of the psychological deficits proposed to be underlying their fire-setting behaviour would be valuable in widening our understanding of effective treatment amongst mentally disordered offenders. Furthermore, as female fire-setters represented only 20% of the sample in this study, a more detailed investigation into female fire-setters' experiences of treatment would also enhance our understanding further and provide insight into the suggested importance of gender responsive approaches to treatment (e.g. Covington & Bloom, 2006).

A second issue concerns the quality and validity of the participants' accounts. Although it would appear that the participants spoke openly and honestly in the interviews, it is not possible to determine the description of the treatment and the effects of the treatment as 'accurate'. However, phenomenological approaches aim to gain an understanding of the respondents' perceptions and feelings, rather than an objective description of events. It is possible that facilitators, therapists, and members of the clinical team might describe the intervention and its effects on the client and other people, quite differently. Further research is needed in order to examine the relationship between clients' experiences of fire-setting treatment, professionals' experiences of fire-setting treatment, and the eventual treatment outcomes in terms of risk and insight, which the present study was unable to investigate.

Despite these limitations, the study suggests several ways in which fire-setting treatment programmes might more effectively meet the needs of mentally disordered offenders with fire-setting history. Utilising a qualitative approach to explore the

experiences of those within a fire-setting treatment programme, provided insight into what participants perceived as vital within intervention (Paulson, et al., 2001) and identified issues that may not have not been raised through qualitative research alone (as suggested by Hodgetts & Wright, 2007). Therefore, the information gained through a qualitative evaluation of the experiences of this intervention is helpful in informing future practice and programme development. Firstly, this study highlighted the components that participants experienced as most effective, such as the importance of providing individual therapy for fire-setting alongside group intervention. However, it is important for clinicians to recognise that individual therapy alone does not necessarily mean better treatment for the clients. This study suggests that engagement in group intervention alongside other individuals with fire-setting behaviours may help facilitate therapeutic progress. Secondly, although development of coping skills is vital, it is also essential that individuals explore and understand their fire-setting behaviour in order to maximise insight into fire-setting, its motives, and its consequences. To support the participants in developing this insight, it is important to be guided by empirical evidence, such as the theoretical models outlined in Chapter one. With this in mind, an understanding of the individual needs of each participant is posited to be essential, in developing a collaborative formulation of their behaviour. The MCMI-III was utilised to enhance understanding of the personality patterns and mental disorders that may have played a role in their fire-setting. This emphasises the importance of psychological formulation using reliable objective measures, in combination with participant self-report and professionals accounts of offending.

Thirdly, variation in approach (particularly the involvement of exercises and activities) is key when providing detailed information within a short time-frame;

otherwise, clients may have difficulties understanding, recalling, and concentrating within and between sessions, which may lessen the chances of effective treatment. It may be beneficial to extend the duration of the intervention in an attempt to minimise the negative impact of delivering considerable information within a short period. The therapeutic relationship is also important when considering treatment programmes for mentally disordered fire-setters, as this may influence the treatment in terms of engagement and openness, which in turn may impact treatment gains.

Fourthly, four of the participants within this study reported elevated anxiety levels (as identified by the MCMI-III) prior to commencing the treatment programme. Although it is not possible to confirm the factors underpinning this elevation, it is hypothesised that the commencement of an unfamiliar offence-focused treatment may have played some role in this (particularly, due to the ‘uncertain expectations’ and concerns about the group confidentiality that all participants discussed). It is suggested that ‘pre-treatment’ individual sessions prior to commencing treatment, may have provided the opportunity to clarify some of these concerns and allowed for a more detailed description of the treatment programme. Alternatively, information booklets on ‘Expectations within the RESCUE programme’ may have been beneficial in reducing anticipatory anxiety for participants.

Finally, the significance of fire-setting as an offending behaviour amongst mentally disordered clients, as opposed to a behaviour that reflects ‘poor coping skills’ or ‘social skills deficits’ should be highlighted, as this may influence the clients’ perceptions and acceptance of their own behaviour and ambivalence to treatment programmes. Maximising the awareness of this amongst professionals whilst minimizing the negative implications to the service users (i.e. perceptions of

them as ‘dangerous’ and ‘untrustworthy’), in order to promote therapeutic understanding, poses a challenge to forensic mental health services.

In conclusion, the findings of this study give a vivid picture of how mentally disordered fire-setters experience an inpatient structured treatment programme and thereby provides a starting point for considering ways in which treatment might progress for this frequently neglected offender group. Research into fire-setting behaviour has tended to overlook treatment programmes, and the few studies available focus on the effectiveness of treatment using quantitative measures identified as relevant by the researcher (as described in Chapter three). An invaluable source of information – the views of the clients themselves, has very rarely been explored. A phenomenological approach has the potential to enrich both our understanding of fire-setting and the debate about how best to treat it.

To summarise, while this study tells us how difficult and challenging it may be to treat mentally disordered offenders, it has also highlighted how valuable treatment can be to them if provided:

‘It was good, an eye opener, and I think it’s given me insight now into fire-setting that

I didn’t have before’ (Louise – T2: L237-239)

‘I found it beneficial towards helping my problems and to deal with, if I had a situation in the past where I was...going to light a fire, I wasn’t sure how to cope with it, now I can cope and...I could deal with those problems’ (Harry – T2: L207-210)

CHAPTER FIVE:

GENERAL DISCUSSION

There is a paucity of research into the field of fire-setting intervention for adults, both within the criminal justice and mental health systems. The lack of provision for this offender group is significant given the continued endeavours to meet the treatment needs of other serious offenders (Mann & Fernandez, 2006; Polaschek, 2006). The main aim of the thesis was to examine the utility of psychological interventions amongst mentally disordered adults who intentionally set fires, looking specifically at previous research into the effectiveness of fire-setting interventions to date, and the experiences of those service users within a structured fire-setting treatment programme. The heterogenic profile of fire-setters highlights the importance of detailed assessment and formulation of the offender and the behaviour prior to any intervention. As mental health difficulties and personality disorders are considered 'core' in the assessment of fire-setters (Doley & Watt, 2012), the use of the MCMI-III as an objective measure of personality and psychopathology within the forensic population was discussed.

Chapter one explored how research has progressed over the past twenty years, moving from the simplistic view that 'mental disorder' is a type of fire-setter (e.g. Geller, 1992), towards recognising that mentally disordered fire-setters are as heterogeneous as those detained within the criminal justice systems (in terms of developmental histories, personality influences, and motivations for fire-setting). This is recognised within the Multi-Trajectory Theory of Adult Fire-setting (Gannon et al. 2012) which offers an understanding of how multiple factors (i.e. personality factors and mental health difficulties) may interact and result in a psychological vulnerability

to fire-setting behaviour. These theory developments have implications for the treatment of those with fire-setting behaviour, as they suggest either the necessity for multiple approaches when working with this client group (such as different therapeutic interventions), or alternatively, a modular based programme that encompasses all the necessary elements.

In order to identify or develop treatment interventions for fire-setters, formulating the behaviour is essential. As discussed in the various models of fire-setting, the personality and psychopathology of an individual may contribute to the behaviour. Furthermore, adults who intentionally set fires may require psychiatric evaluation and/or psychological assessment, in order to determine whether they are detained within inpatient settings (either under a civil section or criminal sections). One of the psychometric instruments used to assess the personality and psychopathology of an individual is the MCMI-III (Millon, 1994). Chapter two explored the use of the MCMI within forensic settings and concluded that it can be a reliable measure which offers clinicians' important information regarding the presence of personality traits and clinical syndromes, particularly within mental health settings consistent with the setting of the qualitative research study described in chapter four. The use of the MCMI-III within criminal proceedings (for non-mentally disordered offenders) was of concern due to the tendency to 'over diagnose' personality disorder in minimally dysfunctional populations (Boyle & LeDean 2000).

Chapter three examined the effectiveness of various psychological approaches within the literature, when working with adults who intentionally set fires. The purpose of the systematic review was to provide a more detailed appraisal of fire-setting treatment programmes than was previously conducted by Palmer, et al. (2005) in their review of the literature on interventions with arsonists. Palmer et al's. review

was restricted both in terms of the inclusion of articles that met the stringent criteria set by the Correctional Services Accreditation Panel (CSAP) and the target population explored (UK), both of which resulted in no adult interventions being identified as available for review.

By conducting a worldwide search of fire-setting interventions, and including research studies of a lesser quality than the standards set by CSAP, the chapter systematically reviewed 12 articles and found some improvements across a range of psychometric measures and a cessation of fire-setting during follow-up. Interventions utilised within these articles included group and individual cognitive behavioural therapy (CBT) sessions, a multimodal programme incorporating both individual and group therapy sessions targeting fire-setting behaviour, aversion therapy, orgasmic reconditioning, and individual cognitive analytic therapy (CAT). Alternative generic interventions (e.g. social skills training) also demonstrated statistically significant improvements in comparison to a control intervention, and a cessation of fire-setting behaviour at a one year follow-up (Rice & Chaplin, 1979). The quality of all the articles reviewed in this chapter was limited, and although caution should be used when drawing conclusions, the interventions reviewed did indicate optimism for the effectiveness of interventions with adults who intentionally set fires.

These psychological interventions may also be considered in addressing some of the treatment indicators outlined within the most recent and comprehensive model of fire-setting (Multi-Trajectory Theory of Adult Fire-setting: M-TTAF: Gannon, et al. 2012). Figure 7 outlines the proposed trajectories within this model, and how the risk factors associated to these might have been targeted by the interventions outlined in Chapter three. The cognitive approaches are suggested to have the most utility across the different trajectories, with the potential of targeting three of the five

proposed pathways to fire-setting. 'Antisocial cognitions' was not identified as a target within any of the articles, despite research suggesting that generally antisocial individuals engage in fire-setting as one of a series of criminal behaviours (e.g. Ritchie & Huff, 1999). However, it is proposed that cognitive approaches may be the most suitable interventions for this trajectory, with the aim of restructuring antisocial attitudes, and achieve goals in a more pro-social manner (Gannon et al., 2012).

The cognitive approaches described in Chapter three also appeared to address the 'Emotionally Expressive' trajectory, as they included psycho-education elements to enhance skills and capabilities. For example, improvements in emotional expression were identified by Swaffer, et al. (2003). Unfortunately, this study failed to utilise psychometric evaluative measures to support these observations and did not offer follow-up data to confirm whether the cognitive approaches reduced this risk factor. Therefore, it can only be hypothesised that such an approach would address the 'Emotionally Expressive' trajectory to fire-setting. An alternative approach to addressing this trajectory includes the use of a social skills training programme, which encouraged individuals to establish social recognition in a more socially acceptable manner than through fire-setting behaviour (Rice & Chaplin, 1979). Positively, this intervention evidenced optimistic follow-up data, and demonstrated the highest quality of all articles. This trajectory is proposed to be particularly relevant for female fire-setters with a diagnosis of Borderline Personality Disorder (Miller & Fritzon, 2007) and may corroborate the use of Dialectical Behaviour Therapy as a suitable intervention for this offender group (Linehan, 1993), due to its emphasis on skills training.

In addition to the cognitive approaches, art therapy is suggested as a possible intervention that may address the 'grievance' trajectory, as this pathway is primarily a

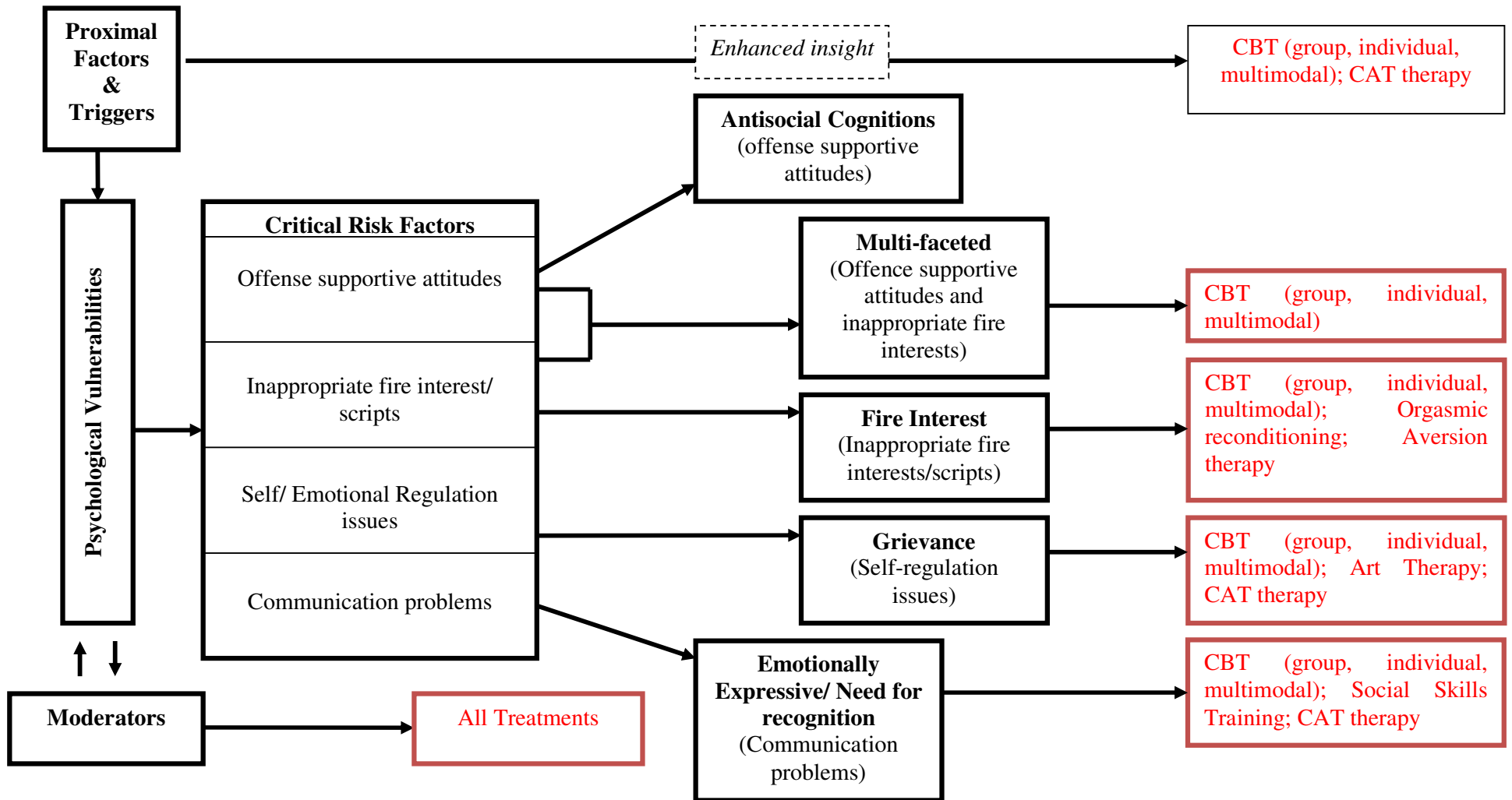
problem with self-regulation (including anger, aggression, and hostility). Delshadian (2003) discusses the dynamic between anger and aggression and fire-setting and self-harm, and proposed that art therapy allows for a more appropriate expression of these feelings. However, the lack of outcome measures or frequency rates of further fire-setting makes it difficult to confirm whether such an approach is effective in reducing the risk factors associated with this pathway.

‘Fire Interest’ may be addressed through the studies utilising either a CBT approach (where the inappropriate fire scripts are challenged and reconstructed) or through conditioning techniques, such as aversion therapy and orgasmic reconditioning. Unfortunately, only three studies utilised psychometrics to assess fire interest and fire-related attitude (Taylor et al., 2004; 2006), and two of these reported no significant reduction post-intervention. Furthermore, despite Taylor et al. (2002) reporting significant improvement in these psychometric measures post-intervention, it is important to recognise that, at present, there is limited data reporting the reliability and validity of these measures, making it difficult to confirm whether fire interest has been adequately addressed as a risk factor. Aversion therapy and orgasmic reconditioning relied more heavily on behavioural or physiological change as a reflection of reduced fire-interest (latencies of striking matches and penile circumference change respectively), and did not explore in more detail whether cognitive interest was still present following intervention.

The cognitive approaches’ emphasis on proximal antecedents (due to their reliance on the Jackson, et al., 1997 model) may have the additional benefit of enhancing an individual’s insight into how these factors may influence fire-setting behaviour, which in turn may reduce risk of future fire-setting behaviour. Positively, Clayton (2000) reported a client gaining a clearer understanding of his understanding

following 16 sessions of Cognitive Analytic Therapy (but failed to provide information on how this was assessed). Similarly, awareness of contingencies, such as the reinforcing aspects of fire-setting, may serve to enhance insight into repetitive fire-setting (contributing to relapse prevention planning) and/or be manipulated to reduce future risk of recidivism (e.g. as demonstrated through the studies by Lande, 1980 and Royer et al., 1971). Low self-esteem has been identified amongst fire-setters (e.g. Smith & Short, 1995), and is proposed within the model to exacerbate existing psychological vulnerabilities, and therefore increase risk. The inclusion of facial surgery in one study (Clare et al. 1992) is posited to not only contribute to the 'Emotionally Expressive' trajectory, but may contribute to enhancing the self-esteem of an individual. Taylor et al. (2002) reported significantly increased self-esteem following the completion of a Cognitive Behavioural group intervention.

Figure 7: The interaction between available psychological interventions, the M-TTAF prototypical trajectories, and the Prominent Risk Factors.



Finally, mental health is viewed primarily as a key moderator that may influence psychological vulnerabilities. Ten of the twelve articles reported intervention within a mental health setting, and therefore it is hypothesised that these psychological interventions would have been developed/implemented with these potential difficulties in mind (as mental health difficulties are likely to greatly limit an already compromised coping response). Improving insight into the role of mental health, and managing these difficulties through psychological or medical management is important in managing future risk (Hodgins, 2004).

Learning disabilities are likely to have contributed to a number of the psychological vulnerabilities within the M-TTAF model. As described in Chapter one (Figure 2), biology plays an important role in the developmental context of fire-setting. Learning disabilities may be associated with a range of neuropsychiatric disorders (Dolan & McEwan, 2012), and an impoverished brain structure contributes considerably in shaping learning and self-regulatory responses (Gannon, et al 2012). Positively, the majority of the treatment programmes reviewed were designed for learning disabled offenders. This is promising since learning disabled arsonists are twice more likely to be recommended for inpatient treatment than sexual offenders (Smith, White, & Walker, 2008).

By mapping the interventions onto the M-TTAF theory, it provides further support for the importance of specific interventions addressing particular deficits or needs, or an all encompassing modular programme that addressed all the proposed trajectories to fire-setting. Although different interventions appeared to address the particular pathways to fire-setting, it is suggested that the alternative approach of utilising a multi-modular programme may be a more cost- and resource- effective option within secure settings. Furthermore, as Gannon et al. (2012) proposed that each trajectory is likely to have other risk factors associated to it (e.g. the 'Grievance' trajectory is proposed to have the prominent risk factor of self regulation difficulties, and is likely to have communication problems and fire-related script

as other risk factors), an all encompassing treatment programme targeting all risk factors is expected to be the most effective for the service user.

This inspired the content of Chapter four, and the desire to enhance our understanding of interventions for adults with mental disorder who set fires, by exploring their experience of a structured modular treatment programme. The service users' perspective on psychological intervention is often ignored in research (Paulson, et al. 2001) despite the important and relative information that such an approach may provide regarding what contributes to treatment effectiveness (McLeod, 2001). Five participants offered their insights into a 16 week intervention programme specifically targeted at fire-setting behaviour, which incorporating all the factors identified as relevant within the numerous theories of fire-setting behaviour outlined in Chapter one. Although the resulting breadth of information was recognised by all participants, the majority reported that all topics were relevant or beneficial despite the heterogenic profile of the sample (i.e. varying psychiatric diagnoses, MCMI-III profiles, demographics, and motives for setting fires). This may offer further support for the development of a programme that encompasses the diverse nature of individuals who set fires.

Only one of the super-ordinate themes within this chapter overlapped with the findings from previous quantitative studies on fire-setting intervention (reported in chapter three), and that was the 'Effects of Treatment'. Table 9 demonstrates how the self-reported effects of treatment within this study were consistent with the reported effects of other interventions. This study also highlighted effects of treatment which were not previously identified in earlier research, which is likely to partly reflect the limitations of psychometric measures (i.e. quantitatively assessing a sense of 'closure' post-intervention).

Table 10: Sub-themes of ‘Effects of Treatments’ (from Chapter 4) and their Association to Previously Reported ‘Effects’ of Intervention.

Sub-Themes identifying the ‘effects’ of current treatment programme	Psychological Interventions in Chapter 3 that achieved these ‘effects’	Author/s of articles
Reduce risk	CBT group intervention Art Therapy Social Skills Training Aversion Therapy Orgasmic Reconditioning	<i>Brown et al. (2000); Taylor et al. (2006) Delshadian (2003) Rice and Chaplin (1979) Royer et al. (1971) Lande (1980)</i>
Provide closure	None identified	-
Wider benefits beyond fire-setting	Individualised CBT Treatment and Facial Surgery Social Skills Training Multimodal modular programme CBT group intervention Individual CAT therapy	<i>Clare et al. (1992) Rice and Chaplin (1979) Swaffer et al. (2001) Taylor, et al. (2002, 2004) Clayton (2000); Hall et al., (2005)</i>
Recognition of increased awareness	Individual CAT therapy	<i>Clayton (2000)</i>
Acceptance of Responsibility	CBT group intervention	<i>Brown et al. (2000)</i>
Impact on others	None identified	-

This emphasises the importance of qualitative methodology in gaining insight into fire-setting intervention programme as it may identify benefits of treatment that are not gained through quantitative analysis alone. Although initial impressions indicate that this treatment programme offered more positive outcomes than previous studies have identified, it is important to recognise that this is based on clients’ self-report (as opposed to an

objective measurement of effect) and therefore, it cannot be concluded whether these 'effects' did occur, and even if they did, whether it was a result of the treatment programme (as opposed to other confounding variables).

A further theme was found related to the importance in variation in delivery of material, in order to aid concentration, understanding, and memory (which are a prerequisite for effective intervention). This is consistent with Andrews and Bonta's (1998) responsivity principle, and the value of accommodating different learning styles when developing interventions (McGuire, 1995). The view of oneself was another theme acknowledged within Chapter four, highlighting the potential association between how offenders view their behaviour and how professionals may minimise fire-setting behaviour in comparison to other offending behaviour (as potentially indicated within Chapter one and three which highlighted the lack of investment into developing our understanding of fire-setting and fire-setting intervention in relation to other offences).

One of the main objectives of the thesis was to contribute to filling the 'literature void' in relation to fire-setting interventions within the adult population. Fire-setting behaviour could be addressed through either a modular intervention programme or more generic interventions, addressing specific psychological needs associated with fire-setting. This thesis highlighted that both have been utilised historically, and that the service users who engaged in a modular programme for fire-setting experienced all elements of treatment as important to them (despite the heterogeneity of the sample). What is not known is the effectiveness of the approach described in Chapter four, as evaluative assessment measures and recidivism rates was not the intention of this thesis. However, all service users perceived decreased risk in fire-setting behaviour and reported feeling more prepared for maintaining this in the future. Nevertheless, firm conclusions cannot be made regarding effectiveness, and

this thesis should only be considered in relation to the implications it may have on theoretical developments and clinical practice.

Theoretical and Clinical Implications

Providing psychological treatment for fire-setters with mental disorders is challenging both for service developers and practitioners alike. Unstructured treatment approaches and the use of generic programmes to address this behaviour, may disregard the importance of addressing the cognitions and multi-factorial interactions related to fire-setting. However, the dearth of published articles outlining treatment approaches and outcomes may have contributed to the tendency for practitioners to address fire-setting through other treatments (e.g. Social Skills) or through non-evidenced based approaches. This thesis has outlined the importance of developing treatment programmes that address the heterogeneous nature of fire-setters, which would allow individuals to comprehend their offence cycle, and understand the antecedents to their fire-setting. To meet the needs of such a varied group, a modular treatment approach was proposed and implemented. Consideration of psychopathology of an individual may ensure treatment is responsive to individual needs'. The heterogenic nature of the participants within this study emphasised the importance of having a good understanding of their personality patterns and mental disorders, in order to adapt the individual sessions accordingly. This highlighted the importance of utilising objective psychometric assessments (such as the MCMI-III) when developing treatment programmes for fire-setting behaviour.

The service users' experiences of such an intervention indicated the importance of balancing offence-focused therapy with the development of coping skills, and providing variation in teaching style to ensure material delivered is interesting and understandable. Ideally, if group intervention is utilised (as both a time and cost effective approach to

treatment and an opportunity for individuals to seek peer support and validation), this should be complimented with individual therapy sessions to provide specific detailed support and enhance the therapeutic relationship between the service user and the therapist/facilitator.

This is not to suggest that a ‘one-size-fits-all’ approach to treatment is appropriate. Instead it highlights the importance of addressing offence-supportive cognitions related to fire-setting, and in providing a range of coping skills to address the many needs of fire-setters. Individualised ‘pathway’ approaches to treatment may have similar utility if they include an emphasis on the fire-setting behaviour, as opposed to exclusively targeting, for example, difficulties with self-regulation and emotional awareness (as suggested by Fritzon (2012) as an approach for ‘integrative’ fire-setters). Without addressing fire-setting directly, professionals run the risk of minimising the offenders’ perceptions of the seriousness of their own behaviour and not focusing on key risk factors.

Limitations

It is important to view these implications in the context of the limitations within the corresponding chapters. Although the qualitative analysis of the experiences of services users within a fire-setting intervention, enhance our insight into what may contribute to effective treatment, the research study included a small sample from one forensic inpatient unit, and therefore findings may not be generalisable beyond this setting. Equally, the study does not claim to be generalisable to the experiences of other service users within other treatment programmes, but attempts to provide a rich contribution to a relatively unknown evidence base. Therefore, the themes identified and considered as having important theoretical and clinical implications may only reflect those believed as important to the five participants interviewed. Likewise, the very nature of IPA methodology may mean that other researchers might have found different themes more significant.

Similarly, care must be taken when generalising the effectiveness of the interventions reviewed within Chapter three to the correctional services. Although this chapter sought to review ‘all’ interventions for adult fire-setters (with or without mental health difficulties or cognitive impairments), only one study was identified that occurred within a prison setting as opposed to within the mental health field (Delshadian, 2003). This limits the external validity of the findings making it difficult to generalise the effectiveness of interventions beyond mental health services.

Future Research

Service user experiences gained through robust qualitative approaches, offer us rich insight into treatment which could enhance the development of future intervention programmes for both mental disorder and offending behaviour. Future studies could focus on enhancing this insight in order to improve our understanding of treatment approaches to the many potential ‘pathways’ to fire-setting behaviour. Equally, it could identify unexpected treatment needs which have not yet been identified through the current theories of fire-setting behaviour. Therefore, future research could focus on applying the same methodology across a range of fire-setting treatment programmes and settings (including correctional settings), with the possibility of developing our knowledge and understanding of what a range of service users find beneficial within treatment.

Consistent with phenomenological approaches, the respondents’ perceptions and feelings towards a structured multifaceted treatment programme were explored (as opposed to gaining an ‘objective’ description of events). The same intervention may have been experienced very differently by professionals involved in their care, and this alternative perception of the utility of such programmes for mentally disordered offenders may enhance our knowledge further. An exploration of this perspective, may have strengthened identified

themes, or identified different and equally as important themes about the experiences of the fire-setting intervention programme.

Finally, identifying treatment outcomes in terms of future risk and improved insight and psychological functioning by utilising appropriate reliable psychometrics, may provide an objective and quantitative evaluation of the treatment programme. However, it is important that future quantitative research into the effectiveness of such interventions is of high quality in order to meet the shortcomings of the literature available to date, as identified in Chapter three.

Conclusions

Fire-setting behaviour can have devastating consequences for society, and can ultimately be life threatening to both the offender and the victims of the crime. Consequentially, adults with mental disorders and fire-setting behaviours are frequently detained in secure mental health settings for treatment. Unfortunately, the provision of specific offence related treatment for fire-setting is limited, which has implications in terms of future risk for fire-setting and the prospect of rehabilitation into the community.

Our understanding of fire-setting behaviour amongst the adult population and fire-setting intervention programmes remains within its infancy. Over the past decade, attempts have been made to enhance the awareness of practitioners and researchers about the need to progress the literature in this area (e.g. Canter & Almond, 2002). The development of suitable interventions is fundamental for reducing recidivism, and once an appreciation of its importance is gained by practitioners and researchers alike and appropriate investments are made into developing the evidence base, the effectiveness of such interventions will also improve

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APPENDICES

Appendix A

Inclusion and Exclusion Criteria Checklist

Inclusion Criteria

Table A1

		Criteria Met
Population	Adults aged 18 or above	
Intervention	Exposure to psychological intervention including individual and/or group therapy	
Outcomes	Arson recidivism, psychological functioning, and/ or behaviour change outcomes	
Study Type	Any study design: No restrictions	
Language	No restrictions imposed	

Exclusion Criteria

Table A2

		Criteria Met
Population	<ul style="list-style-type: none"> • Studies that did not differentiate fire-setters from other offenders in treatment outcomes • Studies that focused on fire-setting amongst children and adolescents 	
Intervention	<ul style="list-style-type: none"> • Studies that focused on pharmacological treatment only 	
Outcomes	<ul style="list-style-type: none"> • Studies that were narrative (descriptive) reviews of treatment but with no outcome measures 	

Appendix B.

Quality Assessment Critical Review Form

Adapted from Critical Appraisal Skills Programme (CASP) and the Critical Review Form for Quantitative Studies (Law, et al. 1998)

CITATION:

Part A: Are the Results valid?	Comments
STUDY PURPOSE: Was the purpose stated clearly? <input type="radio"/> Yes <input type="radio"/> No	Outline the purpose of the study. How does it apply to forensic psychology and/or your research question?
PARTICIPANTS: Is the sample representative? <input type="radio"/> Yes <input type="radio"/> No Were the cases recruited in an acceptable way? <input type="radio"/> Yes <input type="radio"/> No Is there sufficient information on demographic/background factors? <input type="radio"/> Yes <input type="radio"/> No	Sample (who; characteristics; how many; how sampling done?) Was consent gained?
STUDY DESIGN: <input type="radio"/> RCT <input type="radio"/> Cohort <input type="radio"/> Before and After <input type="radio"/> Case-control <input type="radio"/> Cross Sectional <input type="radio"/> Case Study <input type="radio"/> Case Series	Describe the study design. Was the design appropriate for the study question?

<p>Were all important confounding variables identified?</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <p>Did the authors adjust for the effects of these variables in their design/analysis?</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No 	<p>Were any biases operating and how many of these influenced the study?</p>
<p>INTERVENTION:</p> <p>Was it described in detail?</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not addressed <p>Co-intervention avoided?</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not addressed <input type="radio"/> N/A <p>Was reliability of intervention ascertained? Is reliability coefficient reported?</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Partly 	<p>What was the focus? Who delivered it? How often? Setting? Could the intervention be replicated?</p>
<p>OUTCOMES:</p> <p>Were the outcome measures reliable?</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not addressed <p>Were the outcome measures valid?</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not addressed <p>Was blinding used when feasible?</p> <ul style="list-style-type: none"> <input type="radio"/> Yes <input type="radio"/> No 	<p>Specify frequency of outcome measurement (i.e. pre post follow-up)</p> <p>Outcome areas (e.g., anger, social skills) List measures used.</p>

<ul style="list-style-type: none"> ○ Not applicable 		
Part B: What are the results?		
<p>RESULTS: Reported in terms of statistical significant?</p> <ul style="list-style-type: none"> ○ Yes ○ No ○ N/A ○ Not Addressed <p>Were the analysis method(s) appropriate?</p> <ul style="list-style-type: none"> ○ Yes ○ No ○ Not addressed <p>Clinical importance was reported?</p> <ul style="list-style-type: none"> ○ Yes ○ No ○ Not addressed <p>Were drop outs reported?</p> <ul style="list-style-type: none"> ○ Yes ○ No <p>Was follow-up completed and long enough?</p> <ul style="list-style-type: none"> ○ Yes ○ No ○ Partly 	<p>If not statistically significant, was study big enough to show an important difference should it occur? Were multiple outcomes taken into account for the analysis?</p> <p>Were differences between the groups clinically meaningful?</p> <p>Why did people drop out – were reasons given and were they handled appropriately?</p>	
Part C: Clinical Implications		
<p>CONCLUSIONS: Were they appropriate given study method and results?</p> <ul style="list-style-type: none"> ○ Yes ○ No 	<p>What did it conclude? What are the implications for practice? What are the main limitations and biases in the study?</p>	

Appendix C

Data Extraction Sheet

General Information

Author:
Article Title:
Source:
Year:
Volume/Pages:
Country of Origin:
How article was identified:

Specific Information

<i>Study Characteristics</i>
Participants:
Intervention:
Comparison:
Outcomes:
Study Design:

<i>Verification of Study Eligibility</i>
Target Population:
Inclusion Criteria:
Exclusion Criteria:

Appendix D

Electronic Search Results

Search Engine	Hits
PsychINFO 1806 – May Week 3, 2012	n = 601 Limited to ‘adults’ n = 498
Embase Classic and Embase 1947 - Embase 2012 Week 20	n = 598 Limited to ‘adults’ n = 415
Ovid Medline 1946 - May Week 2, 2012	n = 458 Limited to ‘adults’ n = 341

Appendix E

R.E.S.C.U.E PROGRAMME:

FIRE-SETTING TREATMENT PROGRAMME:

A STRUCTURED INTERVENTION PROGRAMME



Definitions

Individuals who start uncontrolled fires are referred to as ‘Arsonists’, if they are apprehended, charged, and convicted of arson.

A person who commits an act of arson that may or may not have resulted in a charge or conviction are called ‘Fire-setters’.

‘Pyromania’ is a rare type of impulse control disorder that is distinct from arson due to the function behind the behaviour. Pyromaniacs rarely start fires due to psychosis, for personal, monetary or political gain, or for acts of revenge. Pyromaniacs start fires to induce euphoria.

Mentally disordered offenders comprise of a diverse group of individuals who may or may not have been tried or found guilty of an offence, therefore the term ‘Fire-setter’ is most appropriate when working with this population (unless a diagnosis of pyromania is evident).

Fire-setting Theory

The formulation of the Fire-setting programme at [REDACTED] will be based on the **Only Viable Option Model** (Jackson, Glass and Hope 1987) which suggests that fire-setting is:

“...an adaptive response, at least regarding short term consequences. In essence this theory proposes that arson provides a highly effective means of escaping or changing difficult to

tolerate circumstances where other means have proved impossible or excessively difficult, been inhibited, been ineffective or perceived as ineffective”.

The three basic tenets of the theory are summarised below:

1. Fire-setters are personally, psychosocially and/or situationally disadvantaged to the extent that they are faced with a strong need to resolve internal or external problems. These disadvantages are the roots of pathological offending of many types and fire-setting is one of them.
2. Fire-setters are prevented from being able to solve these problems in socially acceptable ways due to lack of opportunity, skill or confidence, and therefore resort to the socially unacceptable action of arson. The question raised is why are other socially unacceptable options not adopted?
3. The factors leading to the use of fire may be relatively light or appear insignificant in the wider scheme. In this sense the emphasis for both assessment and treatment is diverted from fire-setting as a central feature to the underlying psychological and situational problems.

FIRE-SETTING TREATMENT PACKAGE

The treatment package consists of four modules that are delivered in sequence:

1. ***Understanding Fire*** – assessing and developing understanding of fire. Exploring the positive and negative consequences of fire-setting including consequences to self (e.g. sentencing, injuries, media, communication) and consequences to others (i.e. victim empathy, injuries, financial implications)
2. ***Enhancing Coping Skills*** – Coping with fire-setting urges and difficulties underpinning the behaviour. Coping skills include emotional awareness and regulation, assertiveness skills, conflict management, and lifestyle choices.
3. ***Exploring fire-setting Behaviour*** – Assessing and developing insight. Exploring offence chain and identifying personal antecedents, beliefs, and consequences.
4. ***Planning for the Future*** – incorporating Relapse Prevention and Good Lives model. Identifying signs of lapse/relapse and planning for ways to overcome these difficulties. Recognising personal strengths and identifying ways to achieve ‘primary goods’.

Fire-setters are not a homogeneous group: There are individual motivations for setting fires such as anger and revenge, lack of assertion, excitement and attention-seeking, delusional behaviour and sexual pleasure. Therefore, a thorough assessment is made with each individual before they begin to participate in a group, to provide the information for the formulation of individualised treatment work concerning the specific details of each service user’s experience of fire-setting.

Assessment

Prior to treatment commencing, all referrals will be assessed in the first instance. This assessment will be conducted through:

- Review of MDT information (file)
- Psychometric testing
- Clinical interview (self report)

This will facilitate the selection of appropriate fire-setting treatment and to increase personal awareness of motives and consequences of fire-setting.

In terms of selecting appropriate treatment, fire-setting typologies appropriate for a mental health forensic setting are utilised to appropriately match clients within group, whilst providing an indication of those deemed to be high risk for recidivism. They will be dual rated to ensure reliability.

Fire-setting is a multifaceted behaviour that includes appreciation of the developmental characteristics of the offender such as previous criminal and psychiatric history, family functioning and development, as well as internal factors such as levels of social competency and intelligence. This information is gathered using the 'Jackson Model of Assessment for Fire-setting', as well as detailed information concerning the actual incidents of fire-setting.

This approach allows information to be gathered that embraces psychiatric, psychological and psychosocial circumstances which surround the development and maintenance of the service user's fire-setting behaviour

Modes of Treatment

Core Group (2 hrs per week)

- The core treatment will be delivered within a group format over sixteen weeks and take the form of a psychoeducational approach.

Individual Sessions (minimum 1hr per fortnight)

Due to the range of clinical presentations of fire-setters and fire-setting behaviours, it renders any form of consistent underlying explanation for all fire-setting as impossible and meaningless. Therefore, the intervention package at [REDACTED] provides a forum in which the client can benefit from individual specific analysis concerning their fire-setting behaviour. Information gathered from the individual specific assessment completed prior to intervention, as well as data gained from ongoing assessment, is used to provide structure to the individual work.

The individual sessions are used to reinforce the concepts and issues that are presented and discussed within the core-group, endeavouring to ensure that the service user has engaged with all elements of the intervention package.

How Treatment meets the Psychological Needs of Fire-setters

Psychological Needs	Sessions that target these:
<ul style="list-style-type: none"> • Fire Interest • Distorted cognitions related to fires 	<ul style="list-style-type: none"> • Understanding Fires Module (negative consequences) • Exploring fire-setting behaviour (offence chain)
<ul style="list-style-type: none"> • General criminality • Offence-supportive beliefs 	<ul style="list-style-type: none"> • Exploring fire-setting behaviour (offence chain) • Enhancing coping skills (lifestyle choices)
<ul style="list-style-type: none"> • Self-regulation difficulties • Emotional regulation problems 	<ul style="list-style-type: none"> • Enhancing coping skills (emotional awareness, expression, and regulation skills) • Preparing for the Future
<ul style="list-style-type: none"> • Communication problems • Social skill deficits 	<ul style="list-style-type: none"> • Enhancing coping skills (assertiveness skills and conflict management) • Group intervention (peer support and modelling)
<ul style="list-style-type: none"> • Lack of insight into behaviour 	<ul style="list-style-type: none"> • Exploring fire-setting behaviour (offence chain and developmental factors)
<ul style="list-style-type: none"> • Mental health difficulties 	<ul style="list-style-type: none"> • Enhancing coping skills (medication compliance) • Individual sessions (psycho-education in mental illness and its contribution to fire-setting)

Appendix F
Ethical Approval

Appendix G

Research Participants Information Sheet

REC ref no: 11/WA/0045

Protocol no: RG_11-010

Study Title: The Experiences of Mentally Disordered Offenders within a Fire-setting Intervention Programme.

Researcher: Sian Hughes, Trainee Forensic Psychologist

Invitation

You are being invited to take part in a research study as part of a post-graduate research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Please ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

What is the purpose of the study?

The research project will last until June 2012 and your involvement will be for about two hours. This will be spread across the treatment programme that you are about to start with a 30 minute interview prior to starting the treatment programme and a different one hour interview following the treatment programme. The aim of the project is explore how service users experience the Fire-setting Treatment Programme. There will be a number of other people within the Fire-setting Treatment Programme involved in the research.

Do I have to take part?

Taking part in this research is voluntary (you don't have to take part). We would like you to consent to take part in this study as we believe that you can give us important information about fire-setting and psychology treatments. If you do not wish to take part, you do not have to do anything in response to this request. If you decide to take part you are still free to withdraw at any time without giving a reason and without any consequences to yourself.

What will I do if I take part?

If you are happy to take part in the research we will ask you to read this information sheet, sign the consent form and return it to us. You will not have to do anything else. Prior to starting the programme, you will be interviewed by the researcher about your thoughts and feelings towards the treatment, and what you expect from treatment. This interview will last about 30 minutes. You will then complete the programme over a 16-week period. This will remain the same regardless of whether you engage in the research. Once you complete the programme, a member of the psychology team will contact you to take part in the second interview. This interview will be about the programme you attended, and to make it easier for you to give an honest view, you will not be interviewed by your psychologist or anyone involved in your care.

This interview will take about an hour to complete, and this can be split over two sessions of 30 minutes if you would prefer. If you have moved to another placement, we can make arrangements to meet you there for this interview.

What will happen if I don't take part?

It is up to you to decide whether or not to take part. You do not have to give a reason if you decide not to take part. If you decide not to take part, you can still take part in the Fire-setting Treatment Programme. The only difference will be that you will not be interviewed about your involvement within the programme (however, you may be asked informally about this as part of your normal psychology sessions following treatment).

What are the possible disadvantages and risk of taking part?

Whether you take part in the research or not will not have any impact on your treatment within Ludlow Street Healthcare. Psychological interventions will still be offered for you, and you may still be asked to discuss your progress through treatment with members of the clinical team. If you *do* decide to take part in the research, the interview sessions *only* will be audio-recorded but once the interview is typed onto the computer all your responses to our questions and the information provided by you will be anonymised (in other words, no personal details relating to you will be recorded anywhere in the research).

However, some of the information you provide during the interview may be similar to some of the information you have given or may give in the future within other psychology sessions when discussing your progress during the treatment programme. If so, this information may be used by the clinical team to inform them of your difficulties and develop treatment plans, but this will happen whether you engage in the research or not.

What are the possible benefits of taking part?

Discussing the intervention you received will offer you an opportunity to think about the programme and whether it has been of benefit to you. This may be beneficial when you are considering with the clinical team your future treatment plan. Also, the information you give during interview may help develop fire-setting interventions in inpatient settings, or other treatments for individuals with your difficulties and behaviours.

Will my taking part in the study be kept confidential?

The two interviews will be audio-recorded; however, your involvement in the research will be confidential. Only the researcher will have access to your details (name, age, etc). All data collection, storage and processing will comply with the principles of the Data Protection Act 1998 and the EU Directive 95/46 on Data Protection. However, it is important to be aware that your Responsible Clinician and the Lead Psychologist within [REDACTED] will receive a letter to inform them of your involvement in the research (and the research title).

However, the treatment programme facilitators (the staff members that run the group or provide individual therapy sessions) will be required to provide feedback to the clinical team in light of the treatment you received (e.g. by writing End of Therapy reports). However, these reports will be based on their observations within the group, within the individual therapy sessions, and through the normal psychometric assessments used. This will occur regardless of

whether you participate in this research. Additionally, we must inform you that if you disclose information that may result in you or anyone else being put at risk of harm we may have to inform the appropriate authorities. If this situation arises we will discuss all possible options for ourselves and you before deciding whether or not to take any action.

Information from the project will only be made public in a completely anonymous format with several people's information combined together in order to ensure that no participant will be identified. Direct quotations may be used when writing up the research but you will not be identifiable from these quotes. You will not be able to be identified in any reports or publications.

What will happen to the results of the research study?

All information provided by you will be stored anonymously on a computer with analysis of the information obtained conducted by the researcher based at Ludlow Street Healthcare Group. They will also be passed to the University of Birmingham as this is a post-graduate research project. The results from this analysis could become available in one or more of the following sources; scientific papers in peer reviewed academic journals; presentations at a regional conference; local seminars. Furthermore, the data collected during the course of the project might be used for additional or subsequent research. You will be able to obtain a copy of the published results from the researcher should this occur.

As mentioned previously, you will not be identifiable in any report, publication or presentation.

Who is organising the research?

The evaluation is being conducted by a Trainee Forensic Psychologist within Ludlow Street Healthcare Group and is being undertaken at the Centre for Forensic and Criminological Psychology at the University of Birmingham.

Who has reviewed the project?

This project has been ethically approved via the NHS ethics review committee. Additionally, the University of Birmingham Research Ethics Committee and the University of Birmingham Research and Development Office have also reviewed the research.

What if there is a problem?

If you are unhappy about the project you can contact Sian Hughes (Researcher) directly to discuss this with her. You may also discuss your concerns with your Responsible Clinician within Ludlow Street Healthcare.

If you would like to make a complaint about the project to someone outside of your clinical team, you may contact Ludlow Street Healthcare Head Office on 029 20 394410 who will talk you through the complaint procedure.

Contact for further information

If you have any questions or there is something you do not understand about what you have read, please contact me for further information. You can contact me in person or by phone. The details are provided below:

Siân Hughes

Psychology Department, [REDACTED]

[REDACTED]

If you would like to be involved in the research project please sign the consent form. Remember, this is voluntary. Thank you for taking the time to read this information sheet.



UNIVERSITY OF
BIRMINGHAM

School of Psychology

Patient Identification Number for this trial:

CONSENT FORM FOR RESEARCH STUDY

Title of Project:

**Please initial
to confirm:**

Name of Researcher:

- I confirm that I have read and understand the information sheet dated March 2011 for the above study
- I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my care or legal rights being affected.
- I understand that the interviews will be recorded, and that direct quotations from these interviews may be used when presenting the results. However, I will not be identifiable from these quotes.
- I understand that relevant sections of any of my medical notes and data collected during the study may be looked at by responsible individuals from Ludlow Street Healthcare, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.
- I agree to my Responsible Clinician and Clinical Psychologist being informed of my participation in the study.
- I agree to take part in the above research study.

Name of Patient Date Signature

Name of Person taking consent Date Signature
(if different from researcher)

Researcher Date Signature

When complete, 1 copy for patient, 1 in Medical file, 1 copy for researcher file, Original to be kept in Psychology file

Appendix I

Experiences of the Fire-setting Intervention Programme: **Pre-Intervention** Semi-structured Interview Schedule

Interviewer notes: Prompts are listed beneath particular questions; however the following probes can be used in addition to these to elicit more information from the participant. These probes include: 'What emotion/s in particular? (use if participant gives general statements like upset/bad or slang terms); 'What was going through your mind? (if participant struggles to identify thoughts); 'Can you tell me more?'; 'Why?'; and 'What do you mean by....'.

Introduction: I am about to ask you some questions in relation to the Fire-setting Intervention programme that you are due to commence. I am recording the interview, and I expect the interview to last between 30 minutes to one hour. If you would like to take a comfort break, please let me know, and we will stop the recording for a short period. There will be 6 questions in total.

1. When you were approached about attending a fire-setting intervention programme, what did you think and how did you feel?

Prompts:

What went through your mind?

How did you feel about it?

2. How do you feel about starting this programme?

Prompts:

Are you looking forward to it? What parts in particular?

Are you worried about anything? What parts in particular?

How do you think you will find the programme?

3. What are you expecting from the programme?

Prompts:

What do you think it will involve?

What topics will it cover?

What do you think will happen in the 1:1 psychology sessions?

What do you think will happen in the group sessions?

What do you think the facilitators will do? What will they be like?

What do you think the therapist will do? What will they be like?

What are you expecting the other clients to be like in the programme?

How do you think you will feel when you are in the programme?

How do you think you will cope in a fire-setting programme?

4. What do you think you will find helpful or unhelpful in the programme?

Prompts:

Within the group setting?

Within the individual sessions?

From the group facilitator?

From your individual therapist?

5. Do you expect anything to change as a result of your involvement in the programme?

Prompts:

Will it change anything within yourself (i.e. the way you think or feel)? If so how? If not, why not?

Will it change anything in your life? If so, how? If not, why not?

Will it change your circumstances? If so, how? If not, why not?

Will it change other people? If so, how? If not, why not?

Closure

That is all the questions. Thank you for taking part in this interview. I am now going to turn off the tape recorder. After this we can discuss how you found the interview, and whether you feel that you need further support following it. Once again, thank you for answering the questions.

**Experiences of the Fire-setting Intervention Programme: Post-Intervention
Semi-structured Interview Schedule**

Interviewer notes: Prompts are listed beneath particular questions; however the following probes can be used in addition to these to elicit more information from the participant. These probes include: 'What emotion/s in particular? (use if participant gives general statements like upset/bad or slang terms); 'What was going through your mind? (if participant struggles to identify thoughts); 'Can you tell me more?'; 'Why?'; and 'What do you mean by....'.

Introduction: I am about to ask you some questions in relation to the Fire-setting Intervention programme that you have recently completed. I am recording the interview, and I expect the interview to last about one hour. If you would like to take a comfort break, please let me know, and we will stop the recording for a short period. If you would prefer to complete the interview over two sessions let the interviewer know and this will be arranged. There will be 20 questions in total.

We will start the interview by you describing aspects of it. Remember, there is no right or wrong. We are trying to get an understanding on how people viewed the programme. There will be questions about other clients, the facilitators, and the therapist during this interview. There will also be questions about whether you found the programme helpful and how it has affected you, if at all. Just to remind you that this interview is confidential and your information will be anonymised prior to the therapist/facilitator having access to your answers. Therefore, please try and be as honest as possible.

1. Can you describe your experience of the fire-setting intervention programme?

Prompts:

What did it involve?

What were the main topics?

What did the group involve?

What did the individual sessions involve?

What was the duration and frequency of the sessions?

2. How did you find the programme?

Prompts:

Did you find the group helpful? Which parts?

Did you find the individual sessions helpful? Which parts?

Did you find the group unhelpful? Which parts?

Did you find the individual sessions unhelpful? Which parts?

How did you feel during the programme?

What did you think of the programme when you were doing it?

3. What was the group facilitators role in the programme?

Prompts:

What did they do?

How did they do it?

4. What was the therapist role in the programme?

Prompts:

What did they do?

How did they do it?

5. What was your role in the programme?

Prompts

What did you do?

How did you do it?

Why do you think this was your role?

Did you do anything helpful in the programme?

Did you do anything unhelpful in the programme?

6. How would you describe your relationship with the facilitators of the group?

Prompts:

What did they do that was helpful?

What did they do that was unhelpful?

How did you interact with them?

What was their style like?

7. How would you describe your relationship with your individual therapist?

Prompts:

What did they do that was helpful?

What did they do that was unhelpful?

How did you interact with them?

What was their style like?

8. How would you describe your relationships with other clients on the programme?

Prompts

Had you had relationships with the clients prior to the programme commencing? If so, how?

How had this changed since you have been on the programme, if at all?

Were these relationships helpful in the programme?

Were these relationships unhelpful in the programme?

9. What do you think about the duration of the programme?

Prompts:

What do you think of the length of the group session?

What do you think of the length of the individual sessions?

What do you think of the frequency of the group sessions?

What do you think of the frequency of the individual sessions?

What do you think of the length of the overall programme?

10. What did you think of the techniques used within the programme?

Prompts:

Group activities?

Role-play?

Home work assignments?

Practice exercises?

Teaching style?

Any other techniques you can think of?

Were any techniques more helpful than others?

Were any techniques less useful than others?

Did you dislike any techniques?

11. What did you think of the content of the programme?

Prompts:

Was there anything not covered that you expected? How did you find this?

Was there anything included that you hadn't expected? How did you find this?

What did you find helpful?

What did you find unhelpful?

What parts of the programme did you not understand, if any? Why do you think this was?

Did the programme cover topics that are important in relation to your past fire-setting?

Did the programme cover topics that were important in relation to your mental health difficulties?

What do you think was the most important part/topic of the programme?

What do you think was the least important part/topic of the programme?

12. Was the programme as you expected?

Prompts

Were the 1:1 sessions as you expected? If so, how? If not why not?

Was the group as you expected? How? Why?

Were the facilitators and therapists as you expected?

Did the other clients react/engage as you expected?

13. Did you notice any changes to yourself because of the programme?

Prompts

Did you notice changes during the intervention?

Did you notice changes following the intervention?

What might have caused these?

Did you notice changes in the way you think?

Did you notice changes in the way you feel?

Did you notice changes to your understanding of your fires, yourself, your coping skills, and your view of the future? In what way? What may have caused these changes?

14. What was your experience of the intervention beyond the intervention setting (in other words, how did your involvement in the fire-setting programme affect other aspects of your care)?

Prompts

During your involvement in the programme, or immediately following the programme, did you have a CPA meeting? If yes, what is your experience of the fire-setting programme within this?

What is your experience of the fire-setting programme within MDT meetings?

Did your involvement in the fire-setting programme impact nursing interactions with you? How?

Did your involvement in the fire-setting programme impact your Responsible Clinicians interactions with you? How?

Did your involvement in the fire-setting programme impact your OT sessions? How?

Did your involvement in the fire-setting programme impact any other psychology sessions you were receiving at the time? How?

Did your involvement in the fire-setting programme affect things on the ward for you?

Were other non-programme clients aware of your involvement in the programme? If so, did this impact their interactions with you?

How was your relationship with other programme clients outside of the group sessions? Was this a result of your involvement in the programme?

Did your involvement impact any other areas of your life outside of the programme? (i.e. family, friends, section 17, and other areas you can think of) If so, how?

15. How did the programme compare to past and current psychology interventions?

Prompts

How did it differ from them?

How was it similar to them?

16. What, if any were the undesirable aspects of the intervention?

17. Did you have an urge to quit the programme at any point (i.e. drop out)?

Prompts

If yes, why did you want to quit?

What made you stay in the programme if you had this urge?

OR

Why did you drop out of the programme?

Prompts

What was the main reason you dropped out? Why did this affect your motivation?

Did you speak to anyone about this? If yes, was it helpful? If not, why not?

How do you feel now about leaving the programme?

Would you want to do the programme again in the future? Why?

What would need to change in your life for you to be involved in the programme again?

What would need to change in the programme for you to be involved again?

18. Would you recommend for someone else with past fire-setting history to engage in the programme?

19. Would you recommend the programme developer to change the programme?

Prompts

If yes, what aspects and why?

What would you recommend they do?

20. Are there any other comments you would like to make in relation to your experience of the fire-setting treatment programme?

Closure

That is all the questions. Thank you for taking part in this interview. I am now going to turn off the tape recorder. After this we can discuss how you found the interview, and whether you feel that you need further support following it. Once again, thank you for answering the questions.

Appendix J.

IPA Analysis of Interview Example

Appendix K

Table A3 Example of Audit Trail

Themes from transcript (in order in which they first appeared)	Collapsing themes	Sub-Themes developed	Super-ordinate Themes to which it later related to
<i>Total = 48</i>	<i>Total = 25</i>	<i>Total=21</i>	<i>Total = 6</i>
Therapy is relevant to me	Therapy is relevant	Perceptions of therapy	Relevance of F.S treatment
Uncertainty of this therapy	Uncertainty about therapy	Perceptions of therapy	Relevance of F.S treatment
F.S. is an issue	Perceptions of self	Perceptions of self as fire-setter	Relevance of F.S treatment
Reduce risk of F.S	Reduce risk	Reducing future risk	Effects of treatment
Preference for 1:1	1:1 component	Component preferences	Structure and Content
Confidentiality Concerns	Confidentiality concerns	Confidentiality issues	Structure and Content
Wider benefits beyond F.S	Wider benefits beyond F.S	Wider benefits beyond F.S	Effects of treatment
Uncertainty of group	Uncertainty about therapy	Perceptions of therapy	Relevance of F.S treatment
Therapist as supportive	Therapist role	Facilitator/Therapist role	Therapeutic relationship
This therapy vs. others	Experience of other therapy	Perceptions of therapy	Relevance of F.S. treatment
Coping skills	Coping Skills	Wider benefits beyond F.S.	Effects of treatment
Common Ground	Common Ground	Common Ground	Relating to others
Prepared for the future	Preparation	Reduce future risk	Effects of treatment
Moving on with life	Moving on	Sense of 'closure'	Effects of treatment
F.S. Therapy is important to others	Therapy for others	Perceptions of therapy	Relevance of F.S treatment
Increased insight into F.S	Increased Insight	Recognition of increased awareness	Effects of treatment
Impact on others	Impact on others	Impact on others	Effects of treatment
Increased insight into antecedents	Increased insight	Recognition of increased awareness	Effects of treatment
Breadth of information	Description of information	Information taught	Structure and Content
Manualised programme	Structure	Manualised vs. Dynamic	Structure and content
Breaks are important	Breaks	Importance of Breaks	Factors influencing attendance

Structure of sessions	Structure	Manualised vs. dynamic	Structure and Content
Understandable	Understanding of information	Information taught	Structure and Content
Facilitator as teacher	Facilitator role	Facilitator/Therapist role	Therapeutic relationship
Facilitator as expert	Facilitator role	Facilitator/Therapist role	Therapeutic relationship
Variation in delivery of material	Variation	Delivery of material	Structure and Content
Preference for variation	Variation	Delivery of material	Structure and Content
Variation increased understanding	Variation	Delivery of material	Structure and Content
Collaboration	Collaboration	Working alliance	Therapeutic relationship
Perception of therapy	Perceptions of therapy	Perceptions of therapy	Relevance of F.S treatment
Techniques to help me understand	Understanding of information	Information taught	Structure and Content
Contribute to others	Contribute to others	Contributing to others	Relating to others
Positive experience of facilitators	Facilitator role	Facilitator/Therapist role	Therapeutic relationship
Positive relationship with therapist	Working alliance	Working alliance	Therapeutic relationship
Relating to others	Comparing	Comparisons	Relating to others
Developed social relationships	Social relationships	Social relationships	Relating to others
Preference for structure	Structure	Manualised vs. Dynamic	Structure and Content
Techniques for recall	Variation	Delivery of material	Structure and Content
Preference for talking	Variation	Delivery of material	Structure and content
Comparing self with others	Comparing	Comparisons	Relating to others
Judgmental peers	Peers	Social relationships	Relating to others
Role-plays helpful	Variation	Delivery of material	Structure and Content
Disliked reading	Variation	Delivery of material	Structure and Content
Anxiety in group	Group component	Component preferences	Structure and Content
Increased insight into consequences	Increased Insight	Recognition of increased awareness	Effects of treatment
Increased insight into beliefs	Increased Insight	Recognition of increased awareness	Effects of treatment
Some techniques unhelpful	Variation	Delivery of material	Structure and Content
Social relationships not maintained	Social relationships	Social relationships	Relating to others

Appendix L

Table A4: Super-ordinate Themes and Sub-themes

Superordinate Themes	Participants involved	Sub-theme	Participants involved	Illustrative Quotes (<i>identified by line numbers</i>)
1. Relevance of fire-setting treatment	Matthew, Harry, Louise, Oscar, Steve	<i>Own view of fire-setting</i>	Matthew, Harry, Louise, Oscar, Steve	Matthew: 11-19, 51-59, 73-74, 76-77, 88-89, 100-101, 124-125, 156-163, 164, 188-189, 195-197, 201-205, 257-265, 280-283, 341-342, 351-357, 360-361, 363-365, 368-369, 605-606, 711-712, 769-772, 821-822, 828-830, 833-836, 841, 918-920. Harry: 207. Louise: 29-30, 209-210. Oscar: 20-21, 29-30, 357-358. Steve: 400.
		<i>Other people's perceptions of fire-setting</i>	Matthew, Louise, Oscar	Matthew: 370-371. Louise: 18-19, 132, 293-294, 458-464, 474-475, 480-482. Oscar: 404-405, 692-693.
		<i>Perception of psychological therapies</i>	Matthew, Harry Louise, Oscar, Steve	Matthew: 47, 57, 141-142, 145-147, 155-157, 169-171, 199-201, 210, 311-312, 374, 498-500, 711, 764-767, 803, 808-809, 819-820 903-904, 971, 1040-1041, 1152-1163. Harry: 4-5, 20-21, 26, 45-46, 49-51, 176-180, 889-895. Louise: 5-6, 10-12, 39, 61-62, 70-71, 73-75, 82-83, 116-117, 248-250, 513-517. Oscar: 24, 48-49, 186-187, 197-209, 219-220, 286-287, 729-733, 736-739, 780-781, 788-789. Steve: 50-51, 466-468, 503.
2. Effects of treatment	Matthew, Harry, Louise, Oscar, Steve	<i>Provide closure</i>	Harry, Louise	Harry: 786-789. Louise: 21-22, 25-26, 48, 50, 109-110, 162-164, 259-260.
		<i>Reducing future risk</i>	Matthew, Harry Louise, Oscar, Steve	Matthew: 967, 970-972, 938-941, 960-963. Harry: 15, 17-18, 138-140, 147-151, 185, 331-332, 337-339, 658-663, 687- 691, 716-723, 763-765, 786-795, 917-922. Louise: 33-36, 43-44, 106-107, 173-175, 189-201, 210-213, 213-221, 225-227, 247-249, 253-254, 253-255, 377-380, 381-383, 438-441, 537-538. Oscar: 163, 286-289. Steve: 335-336, 383-384, 387-389, 399-400, 638-640, 657-659.
		<i>Wider benefits beyond fire-setting</i>	Matthew, Harry, Louise, Oscar, Steve	Matthew: 68-69, 71, 274-276. Harry: 55-56, 86-90, 155-157, 207-210, 251-252, 253-254, 256-257, 282-284, 392-396, 399-402, 420-425, 482-487, 694-699, 715-716, 755-756, 768-769, 779-783, 905-910. Louise: 99, 117, 117, 274-278, 430-431. Oscar: 165, 187, 238-239, 281-282, 614-620, 647-648, 756-758, 760-761. Steve: 96.
		<i>Recognition of increased awareness</i>	Matthew, Harry, Louise, Oscar, Steve	Matthew: 72-73, 315-316, 321, 412-413, 417-418, 653-654, 847-848, 953-954. Harry: 186, 213-216, 219-220, 336, 646-655, 664-667, 706-712, 753-754, 758-763, 772-776. Louise: 40, 50-51, 100, 141-142, 147-152, 154-162, 182-186, 237-239, 404-407, 423-425, 535-536, 547-549, 555-563. Oscar: 322-325, 325-328, 545-547, 547-549, 565-569, 622-630, 636-637. Steve: 123-125, 151-152, 256-257, 332-333, 346-348, 351-353, 392-393, 405-407, 493-494.
		<i>Acceptance of</i>	Matthew,	Matthew: 787-788, 790-796, 810-813, 852-854, 906-911. Louise: 412, 414, 416- 419,

		<i>responsibility</i>	Louise, Oscar	419-420, 450-453. Oscar: 311-316, 529-530.
		<i>Impact on others</i>	Matthew, Harry, Louise, Oscar	Matthew: 128, 288-291, 512-515, 515-518, 593-594, 881-885. Harry: 192-195, 836, 840-842, 849-850, 878-881. Louise: 134-136, 484-490. Oscar: 11-12, 167-168, 258-259, 267-268, 666-670, 672-675, 716, 719.
3. Factors influencing Attendance	Matthew, Louise, Oscar, Steve	<i>External influences</i>	Matthew, Louise, Oscar	Matthew: 369-371, 464-469, 472-473, 476-479, 480-482, 893-894, 987-989, 994-1000, 1005-1014, 1041-1042, 1046-1049, 1109-1111, 1174. Louise: 129. Oscar: 8, 15-16.
		<i>Seeking entertainment</i>	Matthew, Oscar	Matthew: 225, 487-488, 492-495, 503, 573-574, 576-577, 586-588, 590-594, 677-678. Oscar: 16-17, 28, 437, 488-489, 832.
		<i>Mood state</i>	Oscar, Steve	Oscar: 495-496. Steve: 479-480.
4. Content and Structure	Matthew, Harry, Louise, Oscar, Steve	<i>Manualised versus dynamic</i>	Matthew, Harry, Oscar	Matthew: 94, 390-397, 421-424, 431-434, 436-438, 446-448, 451-453, 457-458, 533-534, 639-641, 777-778, 858-865, 871-876, 1123-1124. Harry: 245-247. Oscar: 771-772.
		<i>Delivery of material</i>	Matthew, Harry, Louise, Oscar, Steve	Matthew: 702-704, 718-719, 730-733, 736. Harry: 303, 309-313, 318-319, 331-332, 342-344, 348-349, 372-373, 491-494, 499-500, 579-582, 605-608, 610-614, 742-746, 744. Louise: 393-395. Oscar: 117-120, 291-292, 319-320, 334-346, 338-339, 341-345, 347, 365-370, 388-389, 428-433, 506-509, 511, 515, 515-516, 551-555, 576-579, 587-589, 783-786, 792, 823-825, 839. Steve: 200-201, 281-286, 294-295, 300, 302-303, 322-326.
		<i>Importance of breaks</i>	Matthew, Harry, Steve	Matthew: 613-614, 616-619, 620-622, 1135-1138. Harry: 470-471. Steve: 23-24, 265-266, 483-488.
		<i>Component preferences</i>	Matthew, Harry, Oscar, Steve	Matthew: 270-271, 539-540, 542-543, 586. Harry: 8-11, 31-33, 41-42, 59-61, 77-78, 81-83, 111-112, 121-122, 131-132, 134-135, 227-228, 261-263, 444-448, 508-512, 523-533, 541-544, 547-551. Oscar: 52-53, 95-96, 101, 111-112, 114-115, 139, 155-160, 282, 376-377, 379-380, 384-385, 432-433, 654-656. Steve: 144-145, 371-372, 375-376.
		<i>Information taught</i>	Matthew, Harry, Louise, Oscar, Steve	Matthew: 22, 108-109, 306-311, 324, 330, 346, 374-376, 379-383, 602-608, 631-632, 645-650, 663-665, 669-670, 680-684, 697-699, 703-704, 707, 720, 725-727, 737-738, 740-741, 747-749, 752, 754-757, 784, 931-932, 974-976, 1082-1083, 1144-1145. Harry: 232-233, 236-241, 269-272, 287-288, 291-292, 347-348, 363, 367-369, 374-375, 383, 406-407, 462-469, 474-476, 566-570, 585-588, 591-603, 617-626, 631-632, 679-683, 726-733, 930-931. Louise: 232, 321-323, 354-355, 368. Oscar: 61-66, 242-243, 277-281, 458-463, 495, 512-513, 526-527, 530-533, 540, 832-835. Steve: 37-39, 140, 165-166.
		<i>Confidentiality concerns</i>	Matthew, Harry, Oscar	Matthew: 33-35, 39-44, 86, 133-136, 1055-1056, 1064, 1066-1069. Harry: 827-831. Oscar: 34-35, 135, 142-145, 148-149, 168-169, 358-360, 472-479.

5. Therapeutic relationship	Matthew, Harry, Louise, Oscar, Steve	<i>Working alliance</i>	Matthew, Harry, Louise, Oscar, Steve	Matthew: 128-130, 174, 180-184, 185, 388, 485, 550. Harry: 69-70, 305-307, 322-324, 327-328, 387-389. Louise: 6-7, 67, 241, 241-246, 288, 295-300, 302-304, 316-318. Oscar: 77-79, 353-354, 382-384, 398-400, 403-407, 418-419, 423-424, 683-684, 688-689, 774-776, 804-820. Steve: 223, 470-471.
		<i>Perception of therapist / facilitator</i>	Matthew, Louise, Oscar, Steve	Matthew: 121-122, 213, 216-220, 226-227, 229-230, 239-240, 708. Louise: 260-263, 284-285. Oscar: 61-62, 123-125, 593-594, 407-408, 416. Steve: 54, 59-60, 168-169, 171-172, 182, 193-194, 210-214, 219-220, 225-226, 232.
6. Relating to others	Matthew, Harry, Oscar, Steve	<i>Comparisons to others</i>	Matthew, Harry, Steve	Matthew: 22-23, 29-30, 62-65, 89-90, 252-254, 277. Harry: 355-360. Steve: 184-185.
		<i>Finding a common ground</i>	Matthew, Harry, Oscar, Steve	Matthew: 26-28, 114-115, 123, 224, 506-509, 561-563. Harry: 96-100, 105-106, 447-448, 450-451, 502-505, 515-517, 577-579. Oscar: 128, 441-442. Steve: 81, 197-198, 505-511.
		<i>Social relationships</i>	Matthew, Harry, Oscar, Steve	Matthew: 113-115, 221-222, 558-559, 561. Harry: 411-417, 439-441, 872-874. Oscar: 436-437, 602-605. Steve: 23, 238-239, 245, 253-254, 455-459.