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Implicit Theories of Firesetters

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SALOMONS

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Department of Applied Psychology

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Summary of Major Research Project Portfolio

Section A: A critical review of the literature: Firesetting and the cognitive component of offending.

Section A provides a critical review of the firesetting literature and the cognitive component of offending. Literature pertaining to firesetting is presented including rates, taxonomies and theories of firesetting, the sociodemographics of firesetters and treatment. The review concludes with an overview of social cognitive theory and an exploration of the cognitive aspect of offending.

Section B: The implicit theories of firesetters in secure forensic psychiatric services.

Section B provides findings of a grounded theory study investigating the implicit theories of firesetters. Semi-structured interviews were conducted with nine men detained in secure forensic psychiatric services with a history of firesetting. Six implicit theories were generated, positioned within a social cognitive framework and discussed in relation to the existing theory and empirical evidence. Clinical implications, directions for future research and methodological limitations are discussed.

Section C: Critical appraisal.

Section C provides a critical appraisal of the research process and findings of the study. Learning outcomes and skill development are considered along with a consideration of how, in retrospect, the study could have been carried out differently. Clinical recommendations and directions for future research are considered.

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Section A: Literature Review

Implicit theories of Firesetters

A critical review of the literature: Firesetting and the
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Abstract

Firesetting has significant financial and social implications. Historically firesetters have been viewed as a dangerous group with a poor prognosis and considered difficult to release from secure settings. The literature exploring firesetting has focused on defining the characteristics of firesetters and developing taxonomies, highlighting their heterogeneity and distinction as a separate offender group in terms of personal characteristics, psychopathological and offending profiles. Limited attention has been paid to providing theoretical understandings. Dynamic behaviour theory and the multi-trajectory theory of adult firesetting consider cognition to be influential within the offense process; however, researchers have only speculated about these cognitions. The identification of the implicit theories held by other offender groups, positioned within a social cognitive framework has contributed to the understanding of the way information processing is carried out by these individuals as the exploration of cognitive distortions alone is now considered inadequate. Five implicit theories have been hypothesised to be held by firesetters: dangerous world, normalisation of violence, fire as a powerful tool, fire is fascinating/exciting, and fire as controllable. Future research exploring the implicit theories held by firesetters should be empirical and qualitative in nature and may have the potential to contribute to treatment in secure forensic psychiatric services.

Literature Review

Context

Firesetting has significant financial and social implications. In 2011 approximately 2,213 deliberate fires were set every week in England and Wales, and this figure is increasing (Arson Prevention Bureau, 2011). This resulted in 53 injuries and 2 deaths and damage or destruction to 20 schools, 262 homes and 360 businesses and cost society over £53.8 million each week (Arson Prevention Bureau, 2011).

Firesetters are thought to be difficult to release from secure settings due to the perceived risk they will set further fires that will endanger the lives of others (Harris & Rice, 1996). Brett (2004) and Rice and Harris (1996) concluded that the historic psychiatric literature about firesetters has contributed to the belief that they are a dangerous group with a poor prognosis.

Compared with other offender populations the literature exploring firesetting is limited and has focused on defining the characteristics of firesetters and developing typologies with a limited exploration of theoretical understanding of firesetting. This has left the psychological understanding of firesetting underdeveloped (Gannon & Pina, 2010).

Defining firesetting

Previous reviews (Davis & Lauber, 1999; Gannon & Pina, 2010; Swaffer, Haggett & Oxley, 2001) have used the term firesetting rather than arson to describe all intentional acts of setting a fire. This is because arson is a legal term which varies across jurisdictions and

because many individuals who set intentional fires are not convicted for arson (Harris & Rice, 1996). Therefore, in this review firesetting will be used to refer to all intentional acts of firesetting as it is considered to be a wider concept. The term ‘arson’ or ‘pyromania’ will be utilised where studies refer to people with a criminal conviction for arson or diagnosis of pyromania.

Rates of firesetting

The proportion of adult firesetters in comparison to other offender groups in secure settings is unclear. Rates of recidivist firesetting vary; however the highest recidivism rates are found in maximum secure psychiatric facilities where Rice and Harris (1996) found that 66% of firesetters exhibited some form of recidivism: 16% committed arson, 57% committed a non-violent offence and 31% committed a violent offence. It is of course possible that these figures are an underestimation as some members of the sample may have committed further offences for which they were not apprehended and did not self-disclose. Rice and Harris (1996) found that the factors that contributed to the likelihood of recidivist firesetting were: younger age at the time of the first fire, higher number of firesetting offences, a childhood firesetting problem, low IQ, other criminal charges concurrent with the fire, acting alone when firesetting and low levels of aggression. Crucially, Rice and Harris (1996) found that the variables which predicted violent, non-violent and firesetting recidivism differed, suggesting that firesetting is a distinct offence.

Firesetters' characteristics

Overall firesetters can be considered to be a socially disadvantaged group. Both individual characteristics and social or environment factors have been used to account for firesetting behaviour.

Sociodemographics, family background and personal traits

Firesetters are generally single white males (ratio of males to females 6:1) with a history of unskilled employment or unemployment (Rix, 1994). Female firesetters are generally older than male firesetters, aged 31 years and 25 years respectively (Rix, 1994).

Firesetters have been found to come from large, economically deprived families (Showers & Pickrell, 1987). Rix (1994) found that parental psychiatric disorder, alcohol problems, and separation were common childhood experiences for firesetters, although more so for male firesetters. Firesetters have also been found to have experienced sexual abuse during childhood, particularly female firesetters (Dickens et al., 2007), physical abuse, including burns (Smith & Short, 1995) and neglect (Showers & Pickrell, 1987). A high proportion of both male (27%) and female (38%) firesetters were found to have been in some form of institutional care as children, and 25% were found to have attended a special school (Rix, 1994). Fineman (1995) suggested that adult firesetters were likely to have set fires as children.

These experiences are thought to be likely to impact on a child's ability to form secure attachments with caregivers (Perry, 1997) and their ability to build bonds with others during adulthood (Ainsworth, 1989). Consequently, as adults, firesetters report difficulties with

social relationships, have limited social support and low self-esteem (Räsänen, Puumalainen, Janhonen & Väisänen, 1996; Smith & Short, 1995).

When compared with other offenders, arsonists in maximum secure psychiatric services were found to bear some similarities in terms of high levels of substance abuse, poor occupational and educational history, low socioeconomic status both as children and adults and high levels of psychiatric diagnosis. However arsonists were found to be younger, have a lower IQ, poorer support networks, less history of violence, higher levels of impulsivity and were more likely to have been institutionalised as children and have a family history of firesetting (Labree, Nijman, Van Marle & Rassin, 2010; Rice & Harris, 1991) than other offenders. This indicates that firesetters are a distinct offender group.

Harris and Rice (1984) hypothesised that firesetters are unassertive individuals, who describe themselves as having less control over their lives compared to other hospitalised offenders. Firesetters are therefore potentially “less likely to resolve interpersonal conflicts by interpersonal means than are violent offenders or normal controls [which in turn] may promote an inhibition of interpersonal hostility and the redirection of that hostility towards property” (Jackson, Hope & Glass 1987a, p. 150). It is therefore considered that fire is not the focus of the individual’s interest, but potentially a problem solving strategy and a means to an end (Harris & Rice, 1984).

Psychopathology

Pyromania refers to a pathological form of firesetting and is described in Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR; American Psychiatric Association,

2000) as an impulse control disorder. A diagnosis of pyromania is dependent upon deliberate and multiple firesetting, an intense fascination with fire, gratification with setting a fire and a desire to associate oneself with fire and fire paraphernalia. The firesetting must not be motivated by financial gain, socio-political ideology, desire to mask criminal activity, expression of anger or revenge, an intention to improve living circumstances or the result of delusions, hallucinations, or any other form of judgment impairment. The firesetting must not be better accounted for by any other psychiatric diagnosis (APA, 2000). DSM-IV-TR (APA, 2000) describes diagnoses of pyromania amongst firesetters as “apparently rare” (p. 614) and a recent study found that only 3% of arson recidivists met diagnostic criteria for pyromania (Lindberg, Holi, Pekka & Vikkunen, 2005).

Despite this, firesetting is often strongly connected to psychopathology and psychiatric reports are sought as routine in cases of arson (Rix, 1994). Studies commonly found high levels of mental disorder in firesetters (87%; Rix, 1994), and studies were generally conducted in secure psychiatric settings (Koson & Dvoskin, 1982; Labree et al., 2010; Rice & Harris, 1991).

The most common diagnosis associated with firesetting was personality disorder, most commonly, antisocial personality disorder (Enayati, Grann, Lubbe & Fazel, 2008; Koson & Dvoskin, 1982; Lindberg et al., 2005; Rix, 1994). It is these arsonists that were usually found to be intoxicated during an arson offence (Lindberg et al., 2005). Other commonly documented diagnoses were schizophrenia (Enayati et al., 2008; Koson et al., 1982; Lindberg et al., 2005), alcohol dependence (Enayati et al., 2008; Koson & Dvoskin, 1982; Labree et al., 2010; Lindberg et al., 2005), with up to 68% of arsonists committing the index arson while

under acute alcohol intoxication (Lindberg et al., 2005), affective disorders (Räsänen et al., 1996), and learning disabilities (Enayati et al., 2008; Hill et al., 1982; Koson et al., 1982; Lindberg et al., 2005; Rix, 1994). This profile is different from other mentally disordered offenders, who in particular are thought to have higher rates of schizophrenia diagnoses and lower rates of alcohol dependence (Labree et al., 2010).

Offending history

Studies have shown that firesetting is often part of a wide array of general offending (Rice & Harris, 1991). Most arsonists have been reported to have a previous conviction, although most were for non-violent offences (Rix, 1994). Lindberg et al. (2005) found that 48% of their sample of arsonists in a forensic psychiatric setting had only arson in their criminal histories and Rix (1994) reported a gender difference with 20% of male arsonists and 4% of female arsonists having a previous conviction for arson.

There has been some debate as to whether arson should be categorised as a property offence or a violent offence. Hill et al. (1982) compared arsonists with violent and property offenders and noted that they were a mixture of these two criminal populations. However, they reported that firesetters were more similar to property offenders than violent offenders in terms of personality, diagnosis, history of criminal and violent behaviour, family background and levels of substance abuse. This suggests that firesetters are a distinct offender group.

Classification of firesetters

Attempts at developing taxonomies of firesetters have highlighted the heterogeneity of the population. Classifications have been proposed based on individual characteristics and

professional observations regarding the hypothesized motivational factors underlying firesetting. Jackson, Glass and Hope (1987b) commented that a distinction between arson where there is a clear motivational component (e.g. insurance fraud) and motiveless arson, which is assumed to be pathological, has been made in the research. They go on to note the problems with this description as arson is rarely motiveless and the motives may be “obscure and apparently detached from the firesetting act” (p175).

Lewis and Yarnell (1951) provided the first type of classificatory system for grouping firesetters and identified four categories of firesetters who were judged to have started fires: unintentionally (e.g. through temporary confusion), as the result of delusions, for erotic pleasure (e.g. pyromania-traits or sexual pleasure) or to obtain revenge. This early typology laid the groundwork for other researchers to build upon and numerous other typologies have since been proposed. Notably, ‘revenge’ has been identified as a motivating factor for firesetting in many subsequent classification systems (Inciardi, 1970; Pisani, 1982; Rix, 1994).

Inciardi (1970) identified six categories of firesetters based on hypothesised motivations: revenge (i.e. vengeance), excitement (i.e. pyromania type traits), institutionalised (i.e. firesetting in mental health facilities in order to be relocated), insurance claim (i.e. firesetting to obtain economic reward), vandalism (i.e. firesetting for fun) and crime concealers (i.e. firesetting to conceal another crime). A similar typology was later developed by Pisani (1982) who identified the motives for firesetting as pyromania (10%), revenge (53%), vandalism (12%), fraud (12%), the psycho firesetter (9%) and crime concealment (3%).

Rix (1994) contributed to the agenda with a typology based on hypothesised motivations while distinguishing gender differences. Overall, the most common motivation was revenge, followed by excitement, vandalism, cry for help, attempted suicide, re-housing, psychosis, carelessness, insurance fraud, cover up, heroism, other manipulative, antidepressant, proxy and political. 'Excitement' was found to be a more common motivation for male firesetters and no female firesetters reported 'vandalism' as their motivation. More women set fires as a 'cry for help'. Dickens et al. (2007) supported this notion reporting that fires set by women were more likely to be suicide attempts than those set by men. Finally, the typology developed by Rix (1994) identified that for female firesetters 're-housing' was as common a motivation as 'revenge'.

One of the most contemporary attempts at classifying firesetters was provided by Harris and Rice (1996) who proposed a system for classifying 'mentally disordered arsonists' into four categories based on offence characteristics and motivations. (1) Psychotics: their motives for firesetting are delusional and they are likely to have a diagnosis of schizophrenia and the least likely to have an alcohol problem. They have little criminal history and were not unassertive. (2) Unassertives: this group has the lowest rates of all kinds of recidivism, the best family backgrounds, were more intelligent and better employment histories. They were the least assertive and were likely to have set fires for anger or revenge. (3) Multi-firesetters: this group have the worst childhood histories. They had unstable homes, been institutionalised as children and had parent with psychiatric problems. They had high amounts of aggression and poor school adjustment. They had little criminal history but had set multiple fires. They were most likely to have received psychiatric help. They were the

least likely to have married and were unassertive. They were the most likely to have committed an offence of some other kind and their recidivism rates are high. (4) Criminals: this group have extensive criminal histories. They have poor childhood backgrounds and had un-accepting, abusive parents and were most likely to have a history of aggression as adults. They were the most likely to have a diagnosis of personality disorder.

Theories of firesetting

These classification systems have aided understandings of the types of firesetters in terms of their characteristics and motivations. Understandings have been developed further with five major theoretical frameworks offering explanations of firesetting behaviour.

Psychoanalytic theory

Early conceptualisations of firesetting focused on psychoanalytic explanations. Freud (1932) suggested that the excitement derived from setting fire to something corresponded to sexual excitement and that control of fire required the ability to control urethral impulses. Gold (1962) proposed that the roots of firesetting behaviour were “deep within the personality and [had] some relationship to sexual disturbance and urinary malfunction” (p. 416). Macht and Mack (1967) suggested that fire setting reflected the expression of “instinctual elements of destructiveness and libidinal excitement, but also many organized ego operations, including planning, timing, fantasy elaboration, undoing and identification” (p. 44285). Firesetting was also thought to serve as a protection against the “commission of more feared and tabooed acts” (Gold. 1962, p 412). These early ideas have been largely disputed and contemporary researcher has been unable to support any links between

firesetting and sexual psychopathology (Doley, 2003; Gannon et al., 2010; Harris & Rice, 1984).

Finally, McKerracher and Dacre (1966) proposed that firesetting was the result of displaced aggression, whereby the individual's aggressive drive is suppressed and direct physical expression is inhibited and substituted with firesetting.

Social learning theory

Social learning theorists would view firesetting as a manifestation of reinforcement contingencies and learning through imitation or modelling (Bandura, 1976). Reinforcement is obtained through the sensory excitement associated with fire derived from sirens, voices and crowds. In addition, praise from observers who believe that the firesetter raised the alarm or played a role in fighting the fire provides reinforcement (Vreeland & Levin, 1990).

Social learning theory emphasised the relationship between patterns of family and peer interaction and firesetting behaviour. Firesetting behaviour is thought to be learned from the social environment, particularly from families and friends. Gaynor (1991) suggested that “they may observe it, imitate it, model it and perhaps even be rewarded for it (p.598).

Functional analysis theory (FAS)

Jackson et al. (1987b) provided one of the first multi-factor explanations of recidivist firesetting using a functional analysis framework whereby firesetting is proposed to be facilitated and maintained via a complex interaction of antecedents and consequences.

Jackson et al. (1987a) proposed that central to the model was the concept that arsonists are a particularly disadvantaged group with limited means for influencing their environment, resulting in a “perceived lack of social effectiveness, worthlessness and a heightened need to achieve influence and recognition” (p. 183).

Five antecedents were proposed to underlie firesetting: (1) Psychosocial disadvantage (e.g. poor caregiver relationships and associated psychological consequences), (2) life dissatisfaction and self-loathing (e.g. depression and self-esteem issues stemming from psychosocial disadvantage), (3) ineffective social interaction (e.g. impoverished conflict resolution skills and rejection from others), (4) specific psychosocial stimuli (e.g. previous vicarious or individual fire experiences) and (5) internal or external firesetting triggers (e.g. affective states, or particular contexts that trigger firesetting urges).

Both the positive and negative consequences of firesetting were proposed to be reinforcing, facilitating and maintaining the behaviour. In the short-term firesetting provides a means of influencing events (e.g. gaining increased attention from distracted or distanced caregivers) and improving self-esteem (e.g. by gaining recognition and approval from peers). However, the long term consequences (e.g. rejection, punishment) serve to exacerbate the initial antecedent problems responsible for firesetting (Jackson et al., 1987b). They concluded that “arson is not considered as an attempt by arsonists to bring about specific changes but as a desperate attempt to effect any change in their life circumstances” (p183).

Dynamic behaviour theory (DBT)

Dynamic behaviour theory (Fineman, 1980; 1995) is another multifactor theory constructed to explain firesetting. It focused on the antecedents of firesetting without consideration of the factors which maintain it. Similarly to FAS (Jackson et al., 1987b), DBT proposed firesetting to be “an interaction between dynamic historical factors that predispose the firesetter towards a variety of maladaptive and antisocial acts, historical environmental factors that have taught and reinforced firesetting as acceptable, and immediate environmental contingencies that encourage the firesetting behaviour” (p.42). Fineman (1980; 1995) proposed that firesetting is a result of a complex and unique interactions of all of the following factors:

- a. Dynamic historical factors that predispose the offender toward many maladaptive and antisocial behaviours (i.e. social disadvantage, social ineffectiveness).
- b. Historical and current environmental factors that have taught and reinforced firesetting as acceptable behaviour (e.g. childhood fire experiences, fire fascination).
- c. Immediate environmental contingencies that encourage firesetting behaviour. These were unpacked into various variables that Fineman (1980; 1995) thought it important for any consulting clinicians working with firesetters to explore:
 - Crisis or trauma preceding firestart (e.g. rejection, victimisation or trauma).
 - Characteristics of the firestart which may provide valuable clues regarding the goals of the firesetting behaviour.
 - Cognitions prior to, accompanying and post firesetting.
 - Affective states prior to, accompanying and post firesetting.

- Firesetting reinforcers, both internal (e.g. satisfaction, recognition or sensory excitation) and external (e.g. financial reward or law evasion).

Multi-trajectory theory of adult firesetting (M-TTAF)

A contemporary multifactorial etiological theory of adult deliberate firesetting which integrated current theory, typological and research knowledge has been proposed by Gannon, Ciardha, Doley and Alleyne (2012). The M-TTAF proposed that developmental, biological, cultural, social learning and contextual factors interact with an individual's psychological vulnerabilities and leads to firesetting. Individuals are considered to fall along a continuum for each of the identified psychological vulnerabilities (inappropriate fire interest/scripts, offence supportive cognition, self/emotion regulation issues and communication problems). It was proposed that this interaction produces 'critical risk factors' whereby existing psychological vulnerabilities become primed prior to firesetting. It is this interaction that is proposed to facilitate firesetting behaviour.

Using combinations of these interactions Gannon et al. (2012) proposed five prototypical trajectories associated with firesetting: antisocial cognition, grievance, fire interest, emotionally expressive/need for recognition and multifaceted.

Mental health and self-esteem were deemed as moderators between the interaction and it is these moderators that dictate how severely a proximal trigger will reflect and interact with an individual's psychological vulnerability to produce critical risk factors that facilitate firesetting.

Similarly to the FAS (Jackson et al., 1987b) and DBT (Fineman, 1980; 1995), the M-TTAF (Gannon et al., 2012) viewed maintenance to occur through reinforcement principles. Desistance was considered to be executed by individuals with increased feelings of personal control, hope and strong social ties.

Theoretical Underpinning

Cognitive approach to offending

Social cognitive theory

Social cognitive theory (Bandura, 1986) is an expansion of social learning theory (Bandura, 1977) incorporating idiosyncratic internal events, such as cognition and affect, and environmental events into the model to account for an individuals' organisation and regulation of their behaviour (Sestir & Bartholow, 2007).

Social cognition is interested in how individuals cognitively construct their social experiences (Gannon, 2009). The approach focuses on individual cognitions or thoughts as processes which intervene between observable stimuli and responses in specific real world situations (Fiske & Taylor, 1991). Differences in social perception and experiences are reflected in the content and organisation of an individual's beliefs (i.e. schemas, implicit theories), which hold strong reciprocal links to each other (Fiske & Taylor, 1991).

Schemas (e.g. cognitions or thoughts) about the self and the social world provide individuals with beneficial and largely automatic guidance regarding how to make sense of their own and others behaviours. They provide predictions of the social world based upon

expectations, rather than objective reality. Because of this, errors of perception may result in negative and devastating social consequences (Fiske & Taylor, 1991).

When individuals have the time and resources, they can and do interpret their own and other people's behaviour in a logical, deliberate and careful manner (i.e. the naïve scientist approach to social information processing; Fiske & Taylor, 1991). However, individuals often automatically and unconsciously take information processing shortcuts and rely upon their pre-existing schemas to understand a chaotic and ambiguous social world (i.e. the cognitive miser approach; Augoustinos & Walker, 2005).

Individuals are less likely to interpret behaviours in a logical, deliberate and careful manner when there is an increase in emotional load, such as anger (Fiske & Taylor, 1991), and it is at these times pre-existing schemas are more likely to be utilised. Hollon and Kris (1984) suggested that affective states may increase the availability of specific types of information and that individuals tend to look primarily for evidence that supports pre-existing expectations rather than to consider the full array of available evidence. As a result it is thought that beliefs are ideas or propositions accepted as true, irrespective of actual objective truths (Fiske & Taylor, 1991)

A social cognitive approach therefore argues that social behaviour is best understood as a “function of people's perceptions of reality, rather than as a function of an objective description of the stimulus environment” (Conner & Norman, 2005, p.5). The question of which cognitions are important in predicting behaviour has been the focus of a great deal of research (Gannon, Ward, Beech & Fisher, 2007). The offending behaviour research began its

investigation into cognitions by exploring cognitive distortions and more recently implicit theories. An overview of this research is provided below.

Cognitive distortions

Early work exploring offending from a social cognitive approach explored offence-supportive cognitions in relation to sexual offending. These offence-supportive cognitions were termed ‘cognitive distortions’ (Abel, Becker & Cunningham-Rathner, 1984; Abel et al., 1989) and thought to be able to account for their offending behaviour (Hanson, Gizzarelli & Scott, 1994; Saradjian & Nobus, 2003; Stermac & Segal, 1989; Hayashino, Wurtele & Klebe, 1995). Cognitive distortions, also known as maladaptive beliefs and attitudes and problematic thinking styles (Ward, Hudson, Johnston & Marshall, 1997) have been thought to suggest some kind of cognitive pathology which leads offenders to severely distort social information (Gannon, 2009). Cognitive distortions were therefore thought to play a role in the offending and have since been identified as a major intervention target for offenders in cognitive behavioural therapy (Gannon & Polaschek, 2006).

Although the concept of cognitive distortions enabled progress to be made in understanding offending, these early ideas did not explain the mechanisms that lead to the development of cognitive distortions, the structure of the belief content, or the aetiological mechanisms by which offence-supportive beliefs influence and were influenced by social information (Gannon, 2009). In addition, there was still a lack of conceptual clarity around the term ‘cognitive distortion’ as research “failed to distinguish between post-offence cognitions and those that predispose men to offend” (Ward et al., 1997, p.498).

Implicit theories

Ward (2000) attempted to address these shortcomings and highlighted that although considerable attention had been paid to documenting the content of cognitive distortions in offenders, they were being discussed as if they existed independently to one another and their underlying structure or nature remained unknown.

Ward (2000) proposed that cognitive distortions are a series of offence supportive beliefs which emerge from underlying causal theories which he termed ‘implicit theories’. Ward (2000) suggested that although schemas are a useful attempt at describing the nature of the mechanisms that generate cognitive distortions it suffers from “ambiguity and lack of conceptual development” (p. 494), since schema can refer to categories, beliefs, scripts or theories and the term therefore requires further refinement.

Implicit theories were called such as they are rarely articulated and may not be easily expressed by individuals. Most implicit theories are thought to be acquired during childhood and undergo transformation throughout the lifespan (Ward, 2000). From an early age knowledge is organised into theories that facilitate understanding of the world that enable individuals to “explain and understand aspects of their social environment and therefore make predictions about future events” (Ward, 2000, p. 495). Ward (2000) suggested that these theories are “relatively coherent and constituted by a number of interlocking ideas and their component concepts and categories” (p. 492). Implicit theories guide the processing of information or ‘evidence’ that is relevant to the theory’s truth or falsity. If evidence does not fit an offender’s implicit theory, it may be reinterpreted, rejected, or rarely, the theory may be modified (Hollon & Kris, 1984). When supported and rehearsed regularly these implicit

theories may become chronically activated, automatically controlling an individuals' interpretations of their social world (Fiske & Taylor, 1991).

Development of maladaptive implicit theories

Ward (2000) hypothesised that implicit theories emerged from an individual's early developmental experiences. An implicit theory which becomes maladaptive may have initially been adaptive and enabled an abused or neglected child to survive by anticipating the violent actions of others. However, later, in an environment with an absence of interpersonal violence, Ward (2000) proposed that such implicit theories are likely to result in overly hostile attributions and aggression towards others. This is likely to lead to further rejection, feelings of resentment and entrenchment of the maladaptive implicit theory. Therefore the experience of poor quality early relationships may impact on the development of adaptive implicit theories and ultimately on-going social alienation and distress (Ward, 2000).

Offending and implicit theories

Relying on implicit theories allows an individual to save cognitive resources during information processing. Since an individual is more likely to resort to the use of implicit theories in determining behaviour or problem solving strategies when under cognitive strain (e.g. due to anger, sexual arousal, intoxication; Fiske & Taylor, 1991), such as pre or during offending, problematic implicit theories may be more likely to be activated.

Ward (2000) argued that implicit theories play an aetiological role in the offence process through skewing offenders' perceptions and experiences of their social world in an offence supportive manner.

The offence supportive or facilitative cognitions of individuals with criminal histories have been the focus of recent research. Specifically, the implicit theories held by child sex offenders (Marziano, Ward, Beech & Pattison, 2006; Ward & Keenan, 1999), rapists (Polaschek & Gannon, 2004; Polaschek & Ward, 2002), sexual murderers (Beech, Fisher & Ward, 2005) and violent offenders (Polaschek, Calvert & Gannon, 2009) have been explored. Common implicit theories hypothesised to be held by offenders include theories regarding their victim (e.g. children are sexual beings, women are unknowable/dangerous, women are sex objects), their own actions (e.g. nature of harm, normalisation of violence, uncontrollability of sex drive) and the nature of their environment (e.g. beat or be beaten, dangerous world; see appendix 2 for details of these studies).

Ciardha and Gannon (2012) are the only researchers to date to consider the implicit theories held by firesetters. Using empirical evidence relating to offender cognition and their clinical experience with firesetters they proposed five potential implicit theories held by firesetters: dangerous world, normalisation of violence, fire as a powerful tool, fire is fascinating/exciting, and fire as controllable. They highlighted how each of these implicit theories relates to the different trajectories proposed in the M-TTAF (Gannon et al., 2012). No data was collected from firesetters to verify these propositions.

There are a number of similarities in the implicit theories held across the offender groups. Since offenders often have similar developmental backgrounds and many are generalist offenders (they do not commit just one type of offence), Ciardha and Gannon, (2012) suggested that it makes sense that they would develop similar cognitions.

Not all offenders are hypothesised to hold all of the implicit theories associated with the individual offence type. Particular configurations of implicit theories may correspond to particular styles or other distinctive elements of offending (Ciardha et al., 2012). Implicit theories may also interact in distinctive ways to guide information processing at different stages of the offense process (Polaschek et al., 2002). It has also been suggested that non-offenders may hold some of the identified implicit theories; therefore implicit theories may be necessary, but not sufficient for offending to occur (Ward et al., 1999).

Treatment

Numerous firesetter treatment programmes and initiatives have been attempted; however, there are no standardised treatment programmes for firesetters in the UK, US or Australasia (Gannon & Pina, 2010). Gannon and Pina (2010) hypothesised that this has been “facilitated and maintained via our lack of knowledge concerning adult firesetters” (p. 233).

Treatment programmes for adult firesetters have varied in their approach. They have included behavioural aversion techniques whereby electric shocks were made contingent on setting fire to paper with a match (Royer, Flynn & Osadca, 1971), social skills training groups (Rice & Chaplin, 1979), based on the premise that arsonists are unassertive individuals (Harris & Rice, 1984), and the encouragement of social integration (i.e. engaging in social, academic and vocational activities) with the aim that this will lead to satisfactory and rewarding relationships, improved perceived effectiveness, autonomy and increased self-esteem and training in conflict resolution (Smith & Short, 1995).

Swaffer et al. (2001) comprised a group based intervention programme for mentally disordered firesetters. The 62 group sessions consisted of 4 modules: dangers of fires – assessing and developing insight, skills development – coping without firesetting, insight and self-awareness – assessing and developing and relapse prevention. However, no post-treatment data has been published.

Treatment has seen some recent developments and therapists are moving away from simply challenging distorted beliefs and towards targeting the core theories or schemas hypothesised to underlie offence supportive statements (Gannon, Ward & Collie, 2007). Ward and Keenan (1999) proposed that effective cognitive restructuring will require the development of more adaptive implicit theories.

Drake, Ward, Nathan and Lee (2001) proposed a group based intervention to target implicit theories. Offence chains are obtained from group members, detailing the thoughts occurring at each stage, thereby eliciting the cognitive distortions. Questioning group members using the conceptualisation of the individual implicit theories as a guide to gain more depth, the cognitive distortions are categorised by clinicians reframing them as implicit theories. Group members discuss how the implicit theories could have manifested and specific experiences that gave rise to their interpretations. They are then assisted to identify the irrational or erroneous aspect of these interpretations and develop more realistic interpretations of the original events and adapt these to everyday situations. No data has been published regarding the effectiveness of this intervention framework.

There is clearly enormous variation in existing treatment efforts for firesetters and some exciting developments with the recent research into the potential implicit theories held by firesetters. Gannon and Pina (2010) argued that since there is a wide range of offences committed by adult firesetters it has been “intuitively appealing to assume that firesetters’ needs are adequately met through a myriad of offending behaviour programs designed for generic offending populations” (p. 233). However, generic offending behaviour programs may not be the most effective treatment, especially considering that there are some very specific variables identified for recidivist firesetting (Rice & Harris, 1996). Gannon and Pina (2010) reported that it is “curious that professionals have not deemed the issue of firesetting unique enough to warrant separate intervention...certainly, base rates of reoffences for firesetting are low, but these are not exceptionally different to the base rates of sexually re-offending. Sexual offenders also hold generalist offence histories, and yet many specialist standardised programs are available” (p. 235).

Summary of findings and directions for future research

Firesetters have clearly been identified as distinct group of offenders. Their personal characteristics (Jackson et al., 1987a; Labree et al., 2010; Rice et al., 1991), characteristics that predict recidivism (Rice & Harris, 1996), psychopathological (Labree et al., 2010) and offending profiles (Rice and Harris, 1996) have been shown to differ in many ways to those of other offender groups.

DBT (Fineman, 1980; 1995) and M-TTAF (Gannon et al., 2012), hypothesised that cognitive patterns or structures play a role in firesetting behaviour and Ward (2000) argued that implicit theories play an aetiological role in the offence process. To date there has been

no empirical investigation of the cognitions of firesetters, only theoretical propositions. Since there are difficulties with relying on self-reported cognitions (i.e. they are often reported in self-serving and often inaccurate ways; Gannon, 2009), Gannon (2009) suggested that exploring implicit theories decreases the room for “erroneous introspective accounts and increases methodological control and rigour” (p. 113).

Future research should be qualitative and focus on exploring the implicit theories held by firesetters which may provide a framework for treatment. Male and female firesetters have been identified as distinct groups, particularly in terms of their developmental history and motivations for setting a fire (Dickens et al., 2007; Rix, 1994). It seems reasonable therefore to hypothesise that the implicit theories held by male and female firesetters may differ. Research should therefore focus on exploring the possibility of gender specific implicit theories held by firesetters.

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Section B: Empirical Paper

The Implicit Theories of Firesetters

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Abstract

Firesetting has significant social and financial consequences. Firesetters are deemed a dangerous group with a poor prognosis. The existing literature has focused on describing the characteristics of firesetters and developing typologies. The psychological understanding of firesetting is limited. Implicit theories are underlying causal theories. Positioned within a social cognitive framework they are thought to be the intervening process between observable stimuli and responses which enable individuals to make sense of their social world and make predictions within it. The identification of implicit theories has contributed to the understanding of the way information processing is carried out by other offender groups. This study aimed to explore the implicit theories held by male firesetters in secure forensic psychiatric services. Using grounded theory methodology, interviews were conducted with nine men with a history of firesetting. Six implicit theories were generated: malevolent world, uncontrollable world, violence is normal, accountability, fire is controllable and fire is a powerful tool. These implicit theories have the potential to be utilised as treatment targets by challenging and restructuring them. Future research should focus on exploring the specific implicit theories at different points in the offense process, those held by subtypes of firesetters, and those held by female firesetters.

Keywords: Implicit Theories, Firesetter, Forensic Psychiatric Secure Services, Social Cognitive Theory

Introduction

Firesetting has significant social and financial implications. In 2011 approximately 2,213 deliberate fires were set each week in England and Wales, resulting in damage to businesses, homes and schools, 53 injuries and 2 deaths and a weekly cost of £53.8 million (Arson Prevention Bureau, 2011).

Firesetters have been deemed a dangerous group with a poor prognosis (Brett, 2004). They have been viewed as difficult to release from secure settings due to perceived risk they will set further fires (Rice & Harris, 1996).

The literature exploring firesetting is sparse and largely limited to describing the characteristics of firesetters and developing typologies, leaving the psychological understanding of firesetting underdeveloped (Gannon & Pina, 2010).

Firesetting – A definition

Similarly to previous reviews (Davis & Lauber, 1999; Gannon & Pina, 2010; Swaffer, Haggett & Oxley, 2001) firesetting will be used to describe all intentional acts of setting a fire as an adult (age >18). This is because arson is a legal term which varies across jurisdictions and many individuals who deliberately set fires are not convicted for arson (Harris & Rice, 1996).

Rates of firesetting

Rates of recidivism in firesetters vary; the highest rates were found in maximum secure psychiatric facilities (66%); 16% committed arson, 57% committed a non-violent offence and 31% committed a violent offence (Rice & Harris, 1996). Rice and Harris (1996) found that younger age at the time of the first fire, higher number of firesetting offences, a childhood firesetting problem, low IQ, other criminal charges concurrent with the fire, acting alone and lower levels of aggression contributed to recidivist firesetting. Crucially, the variables that predicted arson recidivism differed from those that predicted other forms of recidivism, suggesting that firesetting is a distinctive offence.

Firesetters' characteristics

Socio-demographics

Firesetters are generally single white males with a history of unskilled employment or unemployment, with an average age of 28 years (Rix, 1994). They come from large, economically deprived families (Showers & Pickrell, 1987), with parents with psychiatric disorders, alcohol problems and separations (Rix, 1994). They are also likely to have experienced sexual (in particular female firesetters; Dickens et al., 2007) and physical abuse (Smith & Short, 1995) and neglect (Showers & Pickrell, 1987) as children. A high proportion of both male (27%) and female (38%) firesetters have been in institutional care as children, and 25% were found to have attended a special school (Rix, 1994). Consequently, in adulthood, firesetters have difficulties forming and maintaining social relationships culminating in limited social support and low self-esteem (Räsänen, Puumalainen, Janhonen & Väisänen, 1996; Smith & Short, 1995).

Psychiatric history

Pyromania, a pathological form of firesetting and described in Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, APA, 2000) as an impulse control disorder is “apparently rare” (APA, 2000, p. 614). However, firesetting has often strongly connected to psychopathology (Rix, 1994); studies are commonly conducted in secure psychiatric settings (Koson & Dvoskin, 1982; Labree, Nijman, Van Marle & Rassin 2010; Rice & Harris, 1991) and find high levels of mental disorder in firesetters (87%; Rix, 1994),

Personality disorder, especially, antisocial personality disorder (Enayati, Grann, Lubbe & Fazel, 2008) has most commonly been associated with firesetting. Other commonly documented diagnoses were schizophrenia (Koson & Dvoskin, 1982, Lindberg, Holi, Pekka & Vikkunen, 2005; Enayati et al., 2008), alcohol dependence (Enayati et al., 2008), affective disorders (Räsänen et al., 1996), and learning disabilities (Koson et al., 1982). This profile has been found to differ from that of other offenders (Labree et al., 2010).

Offending history

Firesetters are often generalist offenders (i.e. they do not commit just one type of offence; Rice & Harris 1991) and their previous convictions are usually for non-violent offences (Rix, 1994). Firesetters have been found to share characteristics with both violent and property offenders (Hill et al., 1982) providing further evidence that firesetters are a distinct offender group.

Classification of firesetters

The heterogeneity of firesetters has been highlighted through the development of taxonomies based on characteristics and hypothesized motivational factors underlying firesetting.

Lewis and Yarnell (1951) proposed the first classificatory system for firesetters and identified four categories of firesetter who were judged to have started fires unintentionally (e.g. temporary confusion), as the result of delusions, for erotic pleasure or to obtain revenge. Numerous other typologies have since been proposed (Inciardi, 1970; Pisani, 1982).

More recently, Rix (1994) proposed a gender specific typology based on hypothesised motivations and proposed that the motivations for male and female firesetters differed.

Harris and Rice (1996) proposed a classification system for ‘mentally-disordered arsonists’. There were four categories: psychotics, unassertives, multi-firesetters and criminals.

Theories of firesetting

A number of theories have been proposed to aid the understanding of firesetting. Early understandings were based on psychoanalytic theory whereby the roots of firesetting were considered to bare some relationship to sexual disturbance and urinary malfunction (Freud, 1932; Gold, 1962). Contemporary research has been unable to support this (Doley, 2003; Gannon & Pina, 2010; Harris & Rice, 1984). Social learning theorists contributed to this agenda viewing firesetting as a manifestation of reinforcement contingencies and learning through imitation or modelling (Bandura, 1976). Learned from the social environment,

Gaynor (1991) suggested that “they may observe it, imitate it, model it and perhaps even be rewarded for it” (p.598). Reinforcement for firesetting has been proposed to be obtained from sirens, voices, crowds and praise from observers for their role in fighting the fire (Vreeland & Levin, 1990).

Multifactorial theories have generally viewed firesetting as arising from an interplay between historical and environmental factors and immediate environmental contingencies (Fineman, 1980; 1995). Furthermore, it has been suggested that both the short-term (e.g. increased attention from caregivers) and long-term (e.g. rejection, punishment) consequences maintain the behaviour by providing reinforcement and exacerbating the initial antecedents (Jackson, Glass & Hope, 1987). The most contemporary theory of adult firesetting (M-TTAF; Gannon, Ciardha, Doley & Alleyne, 2012) proposed that developmental, biological, cultural, social learning and contextual factors interact with an individual’s psychological vulnerabilities to produce critical risk factors for firesetting. Mental health and self-esteem moderate the severity of this interaction, maintenance occurs through reinforcement principles and desistance is executed by feelings of personal control, hope and strong social ties (Gannon et al., 2012). Combinations of these interactions position individuals on one of five firesetting trajectories.

Cognitive approach of offending

Social cognitive theory

Social cognitive theory (Bandura, 1986) is an expansion of social learning theory (Bandura, 1977). It incorporates idiosyncratic internal events (i.e. cognition and affect) and environmental events into the model to account for the organisation and regulation of behaviour (Sestir & Bartholow, 2007).

The focus is on how individuals cognitively construct their world and on how observable stimuli and responses in specific real world situations are intervened by individual cognitions or thoughts as processes (Fiske & Taylor, 1991). Individual differences in social perception are reflected in the idiosyncrasy of the content and organisation of their beliefs (i.e. schemas, implicit theories). These beliefs hold strong reciprocal links to each other and provide guidance about how to make sense of behaviours, promoting predictions about the social world based on expectations rather than reality (Fiske & Taylor, 1991). These beliefs may become chronically activated when supported and rehearsed regularly (Fiske & Taylor, 1991). Hollon and Kris (1984) suggest that affective states may increase the availability of specific types of information and that individuals tend to look for evidence that supports their pre-existing expectations rather than consider the full array of evidence. The question of which cognitions are important in predicting behaviour has been the focus of a great deal of research.

Implicit Theories (IT)

Research exploring the cognitions of offenders began by exploring offense supportive cognitions or cognitive distortions (Abel, Becker & Cunningham-Rathner, 1984). It was proposed that these cognitive distortions indicated some kind of cognitive pathology leading offenders to severely distort social information (Gannon, 2009) thereby separating them from others and accounting for their offending (Hanson, Gizzarelli & Scott, 1994; Hayashino, Wurtele & Klebe, 1995). Consequently cognitive distortions have been utilised as a major intervention target for offenders in cognitive behaviour therapy (Gannon & Polaschek, 2006).

Ward (2000) highlighted that cognitive distortions were being discussed as though they existed independently to one another. Also, the mechanisms that lead to their

development and described which offense supportive beliefs influenced and were influenced by social information remained unexplained (Gannon, 2009). Ward (2000) suggested that cognitive distortions were a series of offence supportive beliefs which emerged from underlying causal theories, termed ‘implicit theories’. He argued that the term ‘schema’ suffered required further refinement as it suffered from “ambiguity and lack of conceptual development” (p. 494).

ITs were termed as such as they are rarely articulated and were considered to be “relatively coherent and constituted by a number of interlocking ideas and their component concepts and categories” (Ward, 2000, p. 492). They guide the processing of information or ‘evidence’ that is relevant to the theory’s truth or falsity; if evidence does not fit offender’s ITs, the evidence may be reinterpreted, rejected, or rarely, the theory may be modified (Hollon & Kris, 1984). Acquired during childhood, ITs undergo transformation throughout the lifespan (Ward, 2000, p. 495).

Offending and ITs

Ward (2000) argued that ITs play an aetiological role in the offence process through skewing offenders’ perceptions and experiences of their social world in an offence supportive manner.

The ITs held by child sex offenders (Marziano, Ward, Beech & Pattison, 2006; Ward & Keenan, 1999), rapists (Polaschek & Gannon, 2004; Polaschek & Ward, 2002), sexual murderers (Beech, Fisher & Ward, 2005) and violent offenders (Polaschek, Calvert & Gannon, 2009) have been explored. Common ITs hypothesised to be held by offenders

include theories regarding their victim (e.g. children are sexual beings, women are unknowable/dangerous, women are sex objects), their own actions (e.g. nature of harm, normalisation of violence, uncontrollability of sex drive) and the nature of their environment (e.g. beat or be beaten, dangerous world).

Recently, Ciardha and Gannon (2012) proposed five ITs held by firesetters: dangerous world, normalisation of violence, fire as a powerful tool, fire is fascinating/exciting, and fire as controllable. These propositions were based on existing empirical evidence relating to offender cognition and firesetting and the authors' clinical experience with firesetters. No data were collected from firesetters.

There are a number of similarities in the ITs held across the offender groups. Ciardha and Gannon, (2012) suggested that this is due to offenders having similar developmental backgrounds. Importantly, not all offenders are hypothesised to hold all of the ITs relating to their offense type and particular configurations may correspond to distinctive elements of offending (Ciardha et al., 2012) or interact in different ways to guide information processing at different stages of the offence process (Polaschek & Ward, 2002). Also, non-offenders may hold some of the identified ITs; ITs may be necessary, but not sufficient for offending to occur. Factors such as insecure attachment, lack of social competency, poor problems solving skills have been proposed as additional components in the determination of firesetting (Ward & Keenan, 1999).

Treatment

There has been enormous variation in treatment for firesetters and no standardised treatment programs (Gannon & Pina, 2010). Gannon and Pina (2010) argued that since firesetters are often generalist offenders it has been assumed their needs will be met by generic offending behaviour programs, however, firesetters are a distinct offender group (Rice & Harris, 1996).

Recent attempts to align treatment with research led Drake, Ward, Nathan and Lee (2001) to propose a framework for a group-based intervention to target ITs. The intervention required offence chains to be obtained from group members, detailing the thoughts occurring at each stage, thereby eliciting the cognitive distortions. Questioning group members using the conceptualisation of the individual implicit theories as a guide, the cognitive distortions are categorised by the clinician and reframed as implicit theories. Group members discuss how the implicit theories could have manifested and specific experiences that gave rise to their interpretations. They are then assisted to challenge the events giving rise to the manifestation of the ITs, identify the irrational or erroneous aspect of these interpretations and develop more realistic interpretations of the original events and adapt these to everyday situations.

The Present Study

The present study aimed to address some of the gaps in the current research by exploring the cognitive component of intentional firesetting and apply the concept of ITs to the aetiology of firesetting. The present study will focus on male firesetters as they have been shown to be distinct from female firesetters.

Research Questions

1. What ITs are reported by men in secure forensic psychiatric services who have set a fire(s)?
2. What are the cognitive, affective and volitional states pre, during and after setting a fire?

Method

Design

As this was a new area of investigation, an exploratory, qualitative design was employed. Semi-structured interviews were important for data collection to build rapport (Smith, 1995) due to the sensitive nature of the issues under investigation. The study was conducted within a constructivist framework which assumes that there are multiple social realities simultaneously. Data generated in the present study will therefore be constructed through an on-going interaction between the researcher and the participant (Charmaz, 2006).

Participants

The participants were nine men aged between 28 and 56 (mean = 47, SD = 9), all of whom were detained in secure forensic psychiatric units under the Mental Health Act (2007). The length of inpatient stay at the current unit ranged from 6 months to 5 years 8 months. Participant's demographics, psychiatric and offending histories are detailed in Table 1.

Table 1: Participant Characteristics

Participant ¹	Age	Ethnicity	Time at current hospital ²	Diagnosis	Index offense ³	Repeat firesetter ? ⁴	Generalist MHA offender?	MHA Section
Ian	48	White British	1 yr 11 months	Schizophrenia	Violent	Yes	Y	37/41
Ben	46	White British	4 yrs 5 months	Schizophrenia	Arson	No	Y	37/41
Fred	56	White British	1 yr 5 months	Schizoaffective disorder	Arson	No	Y	37/41
Ed	45	White British	1 yr 4 months	Schizophrenia	Violent	Yes	Y	3
Gary	28	Asian or Asian British	1 yr 6 months	Schizophrenia	Violent	No	Y	37/41
Cameron	48	White British	3 yrs 2 months	Schizophrenia	Violent	No	Y	37/41
James	56	White British	6 months	Schizoaffective disorder	Arson	Yes	Y	37/41
Dave	40	White British	1 yr 1 month	Schizophrenia	Non-violent	No	Y	48/41
				Bipolar affective disorder				
Alan	57	White British	5yrs 8 months	Alcohol dependence syndrome Anti-social personality traits	Violent	No	Y	47/49

Procedure

Ethics approval

Ethical approval was sought and received from a local NHs Research Ethics Committee (Appendix 3). Local Research and Development approval was sought and gained from the relevant Trust (Appendix 4).

Recruitment

The service identified inpatients who met the inclusion criteria for the study; men who were inpatients in secure forensic psychiatric services who had set a fire as an adult (>18

¹ The participants were provided with pseudonyms to protect identity.

² Many of these participants were transferred to the current hospital from either another hospital or prison. The length therefore does not represent complete amount of time detained..

³ Index offenses were categorised into ‘violent’, ‘non-violent’ and ‘arson’ to protect identity.

⁴ Refers to participants who have set multiple fires aged >18. ‘Yes’ indicates the participant is a repeat firesetter, ‘no’ indicates they are not.

years old). The exclusion criteria were people not in the above group, those unable to be interviewed in English and those with an intellectual disability.

The responsible clinician (RC) for those identified was contacted by e-mail (Appendix 5) for permission to approach patients under their care. The intention was for the RC to consider issues such as the patients' capacity to consent or any other reasons the patient should not participate.

Patients met with the researcher in a private side-room on the ward, the rationale for the study and the participation process was provided. They either read or had read to them the participant information sheet (Appendix 6). They were provided with a copy and had the opportunity to ask questions. A consent form (Appendix 7) was signed by those who agreed to participate, a copy of which was placed in the individuals' medical file. The RC and GP were informed about their participation in the study (Appendix 8 & 9).

Interview schedule

The interview schedule (Appendix 10), developed to gain an offense process description, was based on an interview schedule designed during a similar study with men who had committed rape (Polaschek & Gannon, 2004), indicating the interview schedule's validity in gaining the information necessary to generate ITs.

Initially, general questions about thoughts about fire and setting fires were asked, accounts of the fires(s) were then explored with a focus on four aspects of the offense process: life in the months leading up to the fire, the proximal build up to setting the fire, the offense and post offense reactions. Cognitive, affective and volitional states were explored at

each stage. As the interviews progressed, the questions were adapted in line with grounded theory (GT) methodology (Charmaz, 2006).

Interviews

In line with the services' security procedures the researcher met with ward staff prior to each interview to ascertain the appropriateness of conducting the interview at that time. Interviews were conducted in a private side-room on the ward at least two days after providing consent. Interviews lasted between 12 and 66 minutes (mean = 30 minutes). Interviews were audio-recorded and transcribed for analysis. Each participant was debriefed at the end of the interview. A letter code was used to identify each transcript.

Data analysis

The methodological approach utilised was GT (Glaser & Strauss, 1967), informed by the developments by Charmaz (2006). Previous research exploring ITs utilised this method and since it was established as a method to generate theory inductively from the data (Charmaz, 1995) and deemed useful for developing conceptual categories or theories by enabling the generation of rich data (Willig, 2001), it was deemed appropriate for the present study.

At the initial open coding stage a liberal approach was taken to identifying material, which was followed by more focused coding whilst remaining open to the possibility of new codes. The codes were then categorised into subcategories and then further refined into main categories which represented the ITs.

Quality Assurance Methods

Throughout this study guidelines by Elliot, Fischer and Rennie (1999) were considered to assure quality control.

To ensure the research was reflexive, part of ‘owning one’s perspective’, a research diary (Appendix 11) was kept throughout the research process and discussions with supervisors were held.

As a means of ‘situating the sample’ a thorough description of the participants and their current life circumstances has been provided.

‘Grounding in examples’ occurred by going back and forth between data and categories and utilising memos (Appendix 12). Quotations from the transcripts were provided within the results section to increase the credibility of the interpretations of the data. Finally, summaries of participants’ offense processes were compared with the generated ITs to ensure all participants’ experiences were represented.

Elliot et al. (1999) recommend ‘providing credibility checks’ to qualitative research studies; line by line coding of three interviews was conducted to ensure the analysis was thoroughly grounded and constant comparative analysis was carried out enabling an on-going assessment of quality (Elliot & Lazenbatt, 2005).

Finally, inter-rater reliability of categories and subcategories was carried out by another trainee psychologist who categorised 36 quotations into categories and subcategories, blinded to the first coder’s results (Appendix 13). There was substantial agreement (Landis &

Koch, 197) for the categorisation of quotes within categories (72% agreement, kappa = 0.67) and subcategories (89% agreement, kappa = 0.78).

Results

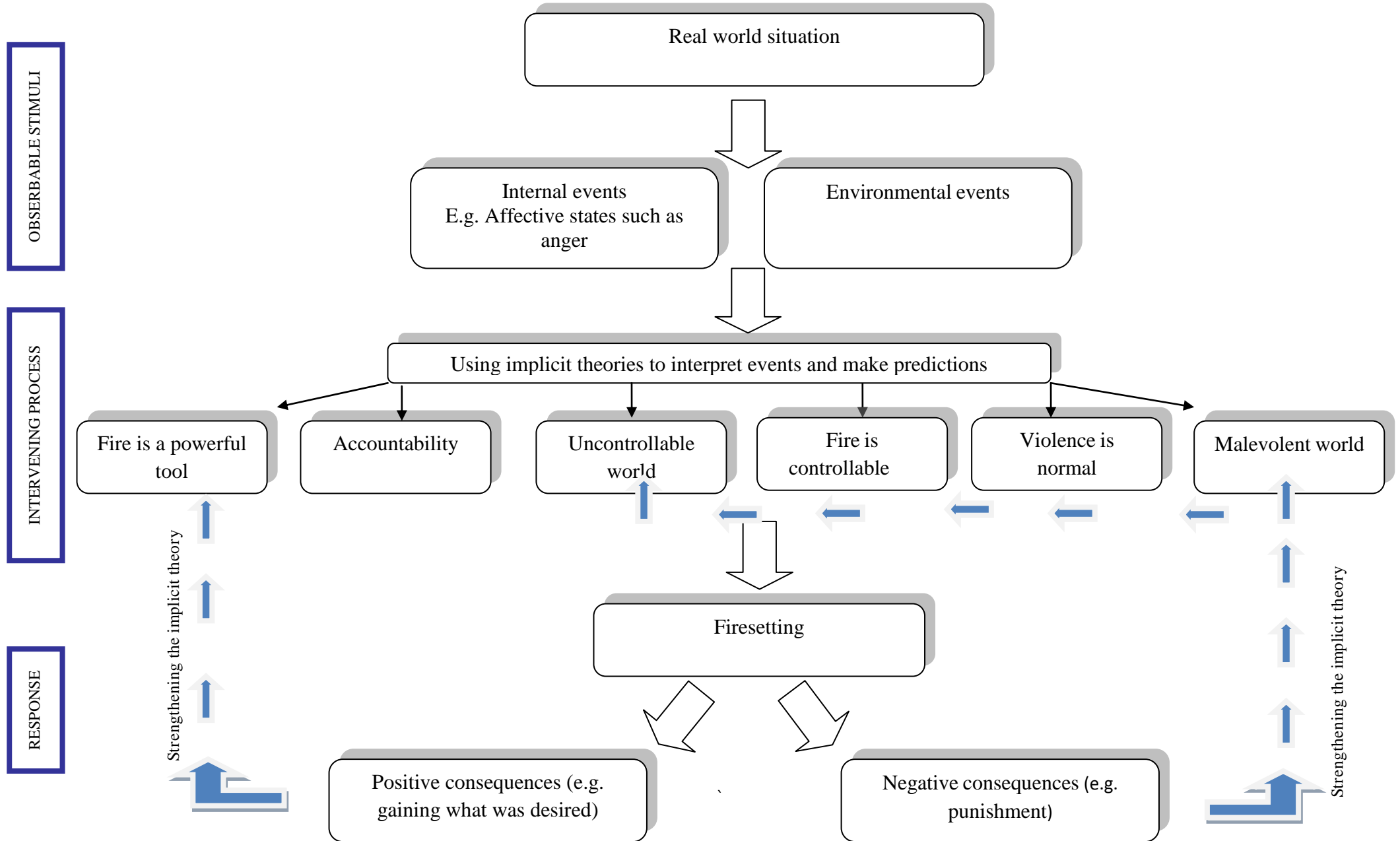
During the initial coding, 319 codes were generated. From this 47 focused codes were generated which formed 18 subcategories. These subcategories were then condensed into six categories to represent the ITs generated from the data (Appendix 14 & 15; Tables 2, 3, 4, 5, 6 & 7).

Overview of the model

The ITs generated from the interview data demonstrate the cognitive processes that may be undertaken by this population. The ITs have been positioned within a social cognitive framework to demonstrate how they act as an intervening process between observable stimuli and responses (Fiske & Taylor, 1991), determining how evidence is to be interpreted in order to make sense of their social world.

It is proposed that the consequences of firesetting may have a strengthening and reinforcing effect on some of the proposed ITs.

Figure 1: A Social Cognitive Theory of Intentional Adult Firesetting: The Role of ITs



Six ITs were generated based on the researcher’s interpretation of the interview data. These ITs will be outlined and evidenced individually and can be organised depending on the degree to which they primarily focus on the participants’ environment (e.g. malevolent world and uncontrollable world ITs), their own actions (e.g. violence is normal and accountability ITs) and fire (e.g. fire is controllable and fire is a power tool ITs).

Malevolent world

Table 2: *Category, Subcategories and Codes Relating the ‘Malevolent world’ IT*

Category	Sub-category	Codes
Malevolent world	(A) People cannot be trusted	Being unable to trust people Experiencing shame Being different
	(B) Struggling to cope in the world	Coping Life being unpredictable Unable to express self

The conceptualisation underpinning the ‘Malevolent world’ IT was that the world is a hostile and dangerous place that is difficult to survive in.

The subcategory ‘people cannot be trusted’ encapsulated beliefs that the world is inherently uncaring and hostile; people are malevolent, will cause harm and are not to be trusted. Experiences with others had left participants with feelings of shame, humiliation, and violation. Other people were viewed as intentionally harmful, based on experiences of others not acting (e.g. not caring or not meeting the individual’s needs) or acting malevolently (e.g. lying, stitching you up):

Dave: “... they was trying to stitch me up and so were the solicitors, judges and things”.

The final subcategory contributing to this IT was ‘struggling to cope in the world’ which reflected a perceived inability to cope with day to day life and unpredictable experiences such as adapting to life in prison and homelessness. Attempts to cope were often maladaptive, such as through the use of substances:

Ben: “That’s the best reason why the fire was set, I couldn’t cope”.

Violence is normal

Table 3: Category, Subcategories and Codes Relating the ‘Violence is Normal’ IT

Category	Sub-category	Codes
Violence is normal	(C) Violence as a way of life	Being invincible
		Being unaffected by violence
		Violence as a way to deal with situations
		Living in a dangerous world
		Power and authority
	(D) Minimising firesetting	Being powerless
		Setting fire to nothing of value
		Underestimating number of fires set
	(E) Firesetting as an acceptable way to express anger	Fire insignificant
		Using fire to express anger
		Using fire to release anger

The ‘Violence is normal’ IT was conceptualised as violence being expected and considered a useful, acceptable and normal way to deal with situations. Violence was portrayed as not being traumatising for either the victim or perpetrator and firesetting was considered just one of a myriad of ways to perpetrate violence.

‘Violence as a way of life’ represented the assumption that that violence was expected and often inevitable and was more likely to be subscribed to by participants who had spent a considerable amount of time in prison. Violence was an acceptable part of daily life; both perpetrating it and being victimised by it. Notably, some participants had experiences they perceived as violent but were unlikely to be intended as so (e.g. forced medication, restraint):

Allan: “... they come in and beat the granny out of me. They injected me up the arse, up each cheek, anyway, that went on, they did me 5 times in 28 days, erm....for nothing...”.

Consequently, power and authority, being constantly alert for violence and learning to protect yourself were important. Participants often described themselves as high up within the prison hierarchy, inferring a position of safety and protection:

Gary: “Like people, innit, like people want to like either steal your stuff or they want to beat you up or things like”.

Violence was also normalised by participants and described as an appropriate way to give and receive deserved punishment:

Alan: “I just say to myself, alright, you deserved it, end of story, let’s move on”.

‘Minimising firesetting’ was a subcategory where their firesetting was either, considered insignificant or unimportant:

Alan: “I mean as far as that silly; I think it’s a silly event”.

The narratives were about the commonality of firesetting, not setting fire to anything of value, how nobody was harmed by their firesetting and an underestimation of the number of fires they had set, leading to beliefs about fire being a normal way to perpetrate violence:

Ian: “Quite a few people do it; quite a few people do set their cells on fire”.

‘Fire is an acceptable way to express anger’ reflected the notion that although violence was often the preferential way to express anger, if it was not possible to perpetrate violence, then firesetting was used:

Interviewer: “What do you think made you chose fire, rather than...punch them or shout at them”.

Ian: “Well you can’t do that on your own can you, like in a room like this”.

Uncontrollable world

Table 4: Category, Subcategories and Codes *Relating the ‘Uncontrollable World’ IT*

Category	Sub-category	Codes
Uncontrollable world	(F) Having limited self-efficacy	Experiencing loss Acting impulsively Having limited control over life
	(G) Living with the consequences	Not thinking about the consequences Living for the day Accepting the consequences of firesetting
	(H) Being in the hands of institutions	Being untreatable Receiving damaging care People having a negative opinion about oneself is normal

The ‘Uncontrollable world’ IT was conceptualised as participants perceiving themselves as having little ability to impact on their social world.

‘Having limited self-efficacy’, the most influential subcategory, encapsulated experiences of uncontrollable events occurring (e.g. loss of care, a relationship breakdown or someone close dying), leading to a wider belief about the world being uncontrollable. Some participants considered themselves not to have the necessary skills to deal with a situation and that firesetting would be more influential:

Interviewer: “So you had to go to the absolute extreme and set fire”?

Ben: “... they wasn’t listening to what I had to say, they weren’t taking much interest”.

The subcategory ‘living with the consequences’ reflected the narratives of impulsivity and not thinking about the consequences of their actions and about accepting the consequences as if they were passive beings being controlled by the world:

Alan: “Yeah, I mean, basically I never used to think about anything, know what I mean, I used to like take life as it comes, do things on the spur of the moment and if the consequences erm were averse then you know I just had to lump it”.

Some participants perceived the consequences of firesetting to be positive (e.g. hospitalisation) and others perceived them as negative (e.g. prison or hospital, segregation or seclusion). The indeterminate nature of the amount of time spent in hospital appeared to add to the passivity and the sense of uncontrollability of the world.

‘Being in the hands of institutions’ subcategory reflected experiences of institutions making decisions on behalf of participants. Participants were referred to as ‘untreatable’ (Ian) and were medicated without their consent:

Alan: “healthcare workers, she goes... ‘they just kept giving you drugs and drugs and drugs and then you just went fucking flat. They they took you down the the [hospital] to have ECT treatment and erm on the third occasion the anaesthetist refused to do anymore because she thought you were having a fucking stroke”...

Accountability

Table 5: *Category, Subcategories and Codes Relating the ‘Accountability’ IT*

Category	Sub-category	Codes
Accountability	(I) External event responsible for firesetting	Negative impact of medication on firesetting Thinking other people should have done something differently Illness causing firesetting Not usually violent
	(J) Experiencing deficit that others should have filled	Being in need Being alone
	(K) Being given no other option	Fire being the only way Setting fire as a last resort

The conceptual underpinning for the ‘Accountability’ IT was that firesetting occurred as a result of an external event or person which without their influence the participant would not have set the fire. Accountability should therefore be placed elsewhere. Further to this, firesetting and violence were not considered to be integral aspects of the participants, demonstrated by codes such as ‘not usually being violent’ (Gary).

The subcategory ‘external event responsible for firesetting’ represented beliefs that had a particular event (e.g. council forcing removal of a car, being put in segregation) not occurred the firesetting would not have occurred. It also encapsulated a narrative about mental health difficulties being responsible for firesetting and beliefs that others should have noticed they were unwell:

Interviewer: “Do you think things might have been different if somebody had noticed things like that?”.

Cameron: “Course they would”.

The subcategory ‘experiencing deficit that others should have filled’ encapsulated beliefs that experiences such as being in need, alone, poor, unable to look after themselves, having no material possessions, feeling frightened and not knowing where to turn to for help led to a deficit which participants considered should have been and was not filled by others. The accountability for firesetting should therefore be placed with others:

Ben: “If the neighbours had been better, been a bit more friendly towards us and then perhaps that wouldn’t have happened sort of thing”.

The subcategory ‘being given no other option’ characterised the belief that as a result of these external events and unfilled deficits participants were given no other option but to set a fire; it was the last resort:

Ben: “I don’t know, just desperate, just don’t know, just couldn’t cope --”.

Consequently, participants tended not to see the firesetting as intrinsically them; distancing themselves from arsonists or firesetters and commenting on the devastating effects fire can have:

Ian: “I don’t agree with a lot of things, but arsonists they erm, they put people at risk...I wouldn’t even dream of doing anything like that”.

Fire is controllable

Table 6: *Category, Subcategories and Codes Relating the ‘Fire is Controllable’ IT*

Category	Sub-category	Codes
Fire is controllable	(L) Fires can easily be controlled	Knowing someone would control the fire Assuming fire can control itself Being in control of the fire
	(M) Fire is a safe commodity	Thinking fire is safe Expressing familiarity with fire
	(N) Firesetting being ‘blown out of proportion’	Reaction of others to firesetting is surprising Others overreacting to firesetting Police viewing firesetting as more serious
	(O) Not causing harm to people with fire	Not intending to harm others with the fire Not intending to ‘cause havoc’

The conceptualisation of the ‘Fire is controllable’ IT was that fire can be controlled and the goals of the firesetting will be achieved without causing any additional harm or destruction.

The subcategory ‘fire can easily be controlled’ encapsulated beliefs that fire can be controlled either by the individual themselves, another individual noticing and controlling it or that fire can control itself; the unpredictability and dangerousness of fire was commonly underestimated:

James: “No, it won’t spread because they’re self-contained and built in such a way, anti-fire stuff, that’s all I can say”.

Interviewer: “So you weren’t worried the fire could get out of hand and nobody would notice?”.

Ian: “(Laughing) well they did notice, of course they noticed”.

The subcategory ‘fire is a safe commodity’ was generated based on the concept that prior familiarity with fire automatically lead participants to believe they were safe with fire:

Ed: “I suppose I’ve always thought the fires were not that bad, I’ve got quite familiar with fire. It’s something that I’ve used, I cook by, I’ve had fires as lot when I’ve been out

sleeping rough and all that. So it's something that's quite familiar to me".

The subcategory 'firesetting being 'blown out of proportion'' reflected surprise at the response of others to fires that had been set, beliefs that it was 'blown out of proportion' (Alan) by others and the consequences were too severe:

Alan: "... there was another fella here, he's still here now...he's been away about...30 years now and all he did was set fire to erm some bales of hay".

The subcategory 'not causing harm to people with fire' reflected notions that setting fires was unlikely to cause harm to anyone, with the underlying belief that that if harm was caused to an individual, it would in fact be the fault of the victim:

Ed: "No, I didn't think anyone could be hurt. I still don't see how anyone could've been hurt unless they run into it".

Fire is a powerful tool

Table 7: *Category, Subcategories and Codes Relating the ‘Fire is a Powerful Tool’ IT*

Category	Sub-category	Codes
Fire is a powerful tool	(P) Knowing the power and danger of fire	Remaining anonymous
		Fire being lethal
		Threats of fire causing concern to others
	(Q) Using fire to impact on a situation	Using fire to solve a problem
		Using fire to avoid punishment
		Gaining desired consequences from firesetting
		Using fire to get what is wanted
		Using fire to send a message
		Using fire as revenge

The ‘Fire is a powerful tool’ IT encapsulated beliefs that fire is a powerful and effective tool for impacting on the social world.

The subcategory ‘knowing the power and danger of fire’ reflected knowledge about the danger of fire and inferring its power if used:

Interviewer: “And what stopped you actually lighting that match and setting the fire?”

Ed: “I wasn’t going to do that”.

Interviewer: “Because you knew that that could be really dangerous or ... ?”

Ed: “Yeah”.

The subcategory ‘using fire to impact on a situations’ reflected the notion that fire, being so powerful and dangerous could be used to impact on a situation and encapsulated the wide range of situations the ‘tool’ of fire could impact upon.

Firesetting was utilised to impact on situations and enabled the participant to get noticed, send a message, make a cry for help, get what is wanted and cause fear. In addition fire could serve as an anonymous tool to solve a problem, avoid punishment or get revenge:

Ed: “It was just a threat, that’s all, just a threat to try and get him to put the petrol in”.

Fred: “I think I must’ve been trying to scare the police”.

Ian: “Yeah, my way of saying basically ‘fuck off, I want to get out of here’”.

Ben: “I couldn’t cope ... so I just set fire to the curtains. It was a cry for help in the wilderness”.

Fire served as an effective tool for some participants who described gaining the desired consequences from firesetting, such as receiving care, removal of an object and effectively solving a problem:

Interviewer: “So perhaps the consequences of setting the fire, it sounds like it’s what you actually wanted, you wanted the help and--”.

Ben: “It’s a shame that I had to be like that to do it really”

Discussion

The purpose of this study was to generate ITs that may act as the intervening process between situations and the response of firesetting within a social cognitive framework for men in secure forensic psychiatric services with a history of firesetting.

Using GT methodology six categories were generated which represented the ITs and 18 sub-categories which provided an explanatory framework and structure for the categories. These ITs are now considered in terms of their origins and development as well as their implications for firesetting within a social cognitive framework.

Malevolent world

The malevolent world IT encapsulated beliefs that the world is dangerous; that people are not to be trusted and will do harm and that coping in this world is a struggle.

For those holding this IT ambiguous situations are likely to be interpreted as hostile, and as with all ITs, information to support this interpretation is likely to be sought and the full range of evidence is unlikely to be evaluated (Hollon & Kris, 1984). Working simultaneously with the ‘fire is a powerful tool’ IT, fire could be utilised as protection, to show others that they are to be feared, to express anger or as a cry for help in a malevolent world. Utilising substances to cope could further skew interpretations of events, making ITs more likely to be relied upon to interpret social information.

The roots of this IT may be in childhood experiences of physical and sexual abuse and neglect (Dickens et al., 2007; Smith & Short, 1995; Showers & Pickerell, 1987). These experiences may have provided the individual with early learning experiences that the world is dangerous and people cannot be trusted.

Violence is Normal

Conceptualised as violence being a normal, useful and acceptable way to deal with situations and one of a myriad of ways to perpetrate violence, firesetting for some was an alternative to preferred direct violence when this was not possible (i.e. they were alone in a prison cell). This links closely with the displaced aggression theory (McKerracher & Dacre, 1966) which postulated that firesetting occurs when a direct physical expression is inhibited and the activity of fire-raising is substituted.

The ‘violence is normal’ IT is likely to lead individuals to expect violence and interpret ambiguous situations as hostile. Firesetting may therefore be used as a means of showing power and showing that they are to be feared, exacerbated by the assumed commonality and acceptability of firesetting. Individuals using fire to express anger are likely to have increased access to this IT as affective states increase the availability of specific types of information (Hollon & Kris, 1984).

Pertinent early experiences such as abuse and neglect (Dickens et al., 2007; Showers & Pickrell, 1987, Smith & Short, 1995) and a family history of firesetting (Labree et al., 2010) may have enabled the child to learn that violence, particularly firesetting, is normal and acceptable. Later life experiences of being rewarded for violence (i.e. position within the prison hierarchy) enables this IT to be rehearsed and chronically activated (Fiske & Taylor, 1991).

Uncontrollable World

The ‘uncontrollable world’ IT was conceptualised as an individual’s perceived lack of ability to impact on their social world.

Underpinned by the concept of limited self-efficacy, firesetters may predict that their personal skills to impact on a situation will fail, reducing motivation and persistence with difficult situations (Bandura, 1989). They may settle for a mediocre solution (Bandura, 1989), in this case, firesetting, and assume this to be a more influential problem solving strategy (Harris & Rice, 1984), especially if held in conjunction with the ‘fire is a powerful tool’ IT.

Increased stress and anxiety associated with being inefficacious may lead individuals to dwell on their coping deficiencies (Bandura, 1989), increasing the likelihood that ITs will be drawn upon to make sense of social situations and determine a response (Hollon & Kris, 1984).

Social persuasion, a source of information regarding one's self efficacy (Bandura, 1977b), is likely to be limited given firesetters limited support networks and low self-esteem (Räsänen et al., 1996; Smith & Short, 1995).

Uncontrollable childhood experiences such as parental psychiatric disorder, alcohol problems and separation (Dickens et al., 2007) and receiving institutional care (Rix, 1994) may have activated this IT. This chaotic and confusing world teaches the child that the world is uncontrollable and that consequences are to be accepted. Adult experiences of institutional care/detention and loss enable rehearsal of this IT, chronically activating it and guiding interpretations of the social world (Fiske & Taylor, 1991).

Accountability

The conceptualisation underpinning the 'accountability' IT was that the actions of others or external events left firesetting the only option.

Combined with the 'malevolent world' and/or 'violence is normal' IT, firesetting is likely to be viewed as the appropriate way to deal with a situation as it was deemed the only option, thereby removing their personal accountability.

This IT may manifest from an external locus of control which has been found to be common for firesetters (Keval., 1989, cited in Forensic Psychology Practice, 1999). Beliefs are likely to be held that life is determined mainly by sources outside of the individual (Lefcourt, 1966) and therefore any accountability for firesetting that can be attributed to the firesetter is limited. The roots of the external locus of control held by firesetters may have arisen out of childhood experiences of physical punishment and rejection (Paguio, Robinson, Skeen & Deal, 1987, Smith & Short, 1995) and failure at school despite attempts at success (Bender, 1995; Rix, 1994).

Fire is Controllable

The ‘fire is controllable’ IT was conceptualised as individuals either underestimating the danger and unpredictability of fire or viewing fire as a safe commodity based on prior experience with it.

This IT may have previously been adaptive and enabled survival; however the unpredictability of fire was often underestimated. Individuals holding this IT may use fire to achieve their goals, especially since they believe it is controllable and/or they are safe with fire and that the goals of the firesetting will be achieved with no other harm or damage caused.

The concept of being an arsonist or firesetter discussed within the ‘accountability’ IT was structured around the pervasive belief that arsonists harm people with fire. For participants considering fire to be safe or controllable they may be able to distance themselves further from the idea of being an arsonist or firesetter.

This IT may have been acquired during childhood as a result of childhood experiences of firesetting and a family history of firesetting (Fineman, 1995; Rice & Harris, 1996). Social learning theory would suggest that firesetting is learnt from the social environment (Bandura, 1976). Through these experiences, beliefs that firesetting is safe, controllable and will only achieve the desired goal are formed. This IT is strengthened with experiences such as cooking or working with fire where the individual was able to control the fire.

Fire is a Powerful Tool

The underpinning of the ‘fire is a powerful tool’ IT was that the power and danger of fire were well known and utilised to impact on situations.

Believing that fire is a powerful tool to influence situations makes fire a likely strategy to use to impact on the social world. Firesetters’ unassertive traits means they are less likely to resolve conflict by interpersonal means (Jackson Hope & Glass 1987) and may resort to using fire. Fire was commonly used to deal with interpersonal situations in the present study.

Social learning theory (Bandura, 1976) would proposed that firesetters’ family history of firesetting (Rice & Harris, 1991), possibly used to influence the social world or resolve interpersonal conflicts would have enabled the child to learn that firesetting is an effective strategy. This IT is likely to be strengthened and chronically activated (Fisk & Taylor, 1991) when the desired consequences from firesetting are gained.

The wider discussion

Four of ITs generated as part of the present study were proposed by Ciardha and Gannon (2012) and conceptualised similarly, thereby increasing the validity of these ITs: ‘malevolent world’ (termed ‘dangerous world’ by Ciardha & Gannon, 2012), ‘violence is normal’ (termed the ‘normalisation of violence’ by Ciardha & Gannon, 2012), fire is controllable and fire is a powerful tool.

The present study deemed ‘malevolent world’ to present a closer description of the conceptualisation of the first IT, reflecting its inter-personal rather than violent characterisation. Of note, the conceptualisation of ‘malevolent world’ has been identified within a range of offender populations and therefore implicated more broadly in general criminogenic behaviour (Ciardha & Gannon, 2012).

‘The normalisation of violence’ IT proposed by Ciardha and Gannon (2012) made a distinction between generalist and specialist firesetters’ reasons for holding this IT. This was not identified within the present study, possibly as all of the participants were generalist firesetters. This may warrant further investigation.

Ciardha and Gannon (2012) proposed ‘fire is fascinating/exciting’ as an IT held by firesetters, which has been supported by empirical evidence (Fineman, 1980; Inciardi, 1970; Rix, 1994) but not identified in the present study. Fire was talked about as ‘fascinating’ and ‘intriguing’ by one participant and others emphasised that people with a special interest in fire were ‘strange’. The most likely reason for this was that at the time of the interview all participants were detained under the Mental Health Act (2007) and there may have been the

belief that talking about fire as fascinating or exciting would lead others to make assumptions about recidivist firesetting.

Clinical Implications

The ITs held by firesetters in secure forensic psychiatric services provide important treatment targets for clinicians. Ward et al. (1999) proposed that effective treatment is likely to require challenging and restructuring these core theories in an attempt to reduce their influence on information processing and decision making. Clinicians should focus on identifying the specific ITs held by individual firesetters which will likely have an impact on the offense supportive cognitions that they underlie. This study has provided some preliminary ITs that may be used as a framework within which to focus both group and individual therapy with firesetters, possibly incorporating the fire brigade for education about fire and its controllability and utilising the framework suggested by Drake et al. (2001).

ITs held by offenders will impact on how they approach treatment (Ward & Keenan, 1999). Clinician's would need to be mindful of the potential ITs held by this population prior to and during treatment.

Future Research

This preliminary study is the first study to generate ITs held by firesetters based on interview data. Therefore, replication would be considered important with a larger sample to enable the theories to be verified and refined.

The present study could be expanded upon by exploring if unique clusters of ITs exist within in the various typologies of firesetters (e.g. generalist or specialist) or at specific points within the offense process.

Since this research focused on the ITs of men, future research should consider exploring the ITs held by female firesetters in secure forensic psychiatric services.

Methodological Limitations

The study utilised a small sample and therefore the results should be interpreted with caution and the qualitative nature of the study limits generalisability. However, given the small evidence base a qualitative study was important to generate rich data.

The sample was self-selected which may have induced bias. The interviews are likely to have been impacted by social desirability bias, although attempts were made to reduce with clear boundaries of confidentiality. The accounts gained were retrospective which could have impacted on the participants' recall accuracy. The limited cultural diversity within this study may impact on its generalisability as ITs are thought to be acquired in childhood and different cultural child rearing practices (Paguio et al., 1987) may impact on the IT's acquired.

A number of measures were in place to increase the credibility of the data; however, triangulation would be important to increase the validity of the findings.

Finally, although the data collected was of a social process, the focus on ‘experience’ within the interviews and the aims of the study resulted in the generation of ITs which formed more of a “systematic map of concepts and categories used by the respondents to make sense of their experience” (Willig, 2001, p. 47). This provided an understanding of experience positioned within an existing theory rather than a standalone theory; however this can still be considered a useful contribution to the literature.

Conclusion

The current psychological understanding of firesetting is limited. The data obtained in this study generated six ITs that may act as the intervening process between observable stimuli and responses within a social cognitive framework, thereby demonstrating the cognitive aspect of the aetiology and maintenance of firesetting.

This study has intended to contribute to the understanding the cognitive component of firesetting in terms of ITs. This theoretical proposal has not intended to be a comprehensive explanation for firesetting, but a generation of preliminary ITs held by firesetters and a consideration of their contribution to the aetiology of firesetting.

ITs are likely to be an important treatment target for clinicians working with firesetters in secure forensic psychiatric services as they are hypothesised to underpin the offense supportive cognitions that lead to firesetting.

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Section C: Critical Appraisal

Implicit theories of firesetters

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University for the degree of Doctor of Clinical Psychology

WHAT RESEARCH SKILLS HAVE YOU LEARNED AND WHAT RESEARCH ABILITIES HAVE YOU DEVELOPED FROM UNDERTAKING THIS PROJECT AND WHAT DO YOU THINK YOU NEED TO LEARN FURTHER? 101

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What research skills have you learned and what research abilities have you developed from undertaking this project and what do you think you need to learn further?

The rigorous and lengthy process of gaining approval from the Research Ethics Committee and R&D encouraged me to think more critically and from a more ethical stance about my study. In particular, the process of gaining consent from participants to take part in research in an environment where they were detained against their will. Requiring participants and considering participants' motivations for participating (e.g. to show cooperation to the unit, hoping that I might disclose their anti-offending attitudes the unit) was an ethical dilemma. Ensuring that I as an external researcher approached participants and explaining the strict confidentiality procedures was important.

Feeding back the results to the participants required a great deal of thought and consideration. It was important to strike a careful balance between 1) informing the participants about the results, 2) maintaining confidentiality as the number of participants was modest and most participants were recruited from the same site, and 3) not causing distress. In particular, the results showed that some of the participants viewed violence as normal and some had reservations about accepting accountability for the firesetting. There may have been some concern from participants about staffs' thoughts about these findings and I was concerned that this could induce distress. Balancing these issues I wrote a brief letter to participants broadly describing the findings, offering them the opportunity to discuss them further.

I have learnt a great deal about different epistemological perspectives and the developments of GT from the more positivist origins of Glaser and Strauss (1967) to the more constructivist developments of Charmaz (2006). The present study was carried out within a constructivist framework, reflecting both my personal beliefs about how knowledge is acquired and the research topic; implicit theories are proposed to be used to interpret events. Conducting the research within this framework reflexivity was an integral part of the research process and an important skill I developed. Using my research diary (Appendix 11) to consider my views of firesetting and firesetters was valuable and I returned to this often to monitor how my views and interpretations were impacting on the research. This became particularly useful when a participant talked about the safety and controllability of fire which I found very surprising. Going back to my original reflections enabled me to think further about whether it was the participant underestimating the power and danger of fire or whether it was me attributing more danger to the situation. Since completing the research I have reflected on one generated subcategory in particular ‘knowing the power and danger of fire’. This subcategory appears to reflect my perceptions about fire and the participants’ agreement with me in knowing it is dangerous. Perhaps ‘power and danger of fire’ would have been a more appropriate term. Also, these cognitions were elicited through questions such as ‘what are your thoughts about fire’. The responses could have been the result of socially desirable responding. Throughout this process I have noticed that reflexivity seems to come easier when undertaking clinical work than research.

Liaising with professionals was at times a challenging task, especially when numerous unanswered emails were sent requesting consent to approach patients. It really highlighted the importance of having the support from the clinical team when carrying out research.

I struggled with the decision as to how best undertake validity checks. Seale (1999) highlighted that the researcher should revise claims in light of what is revealed rather than “confirming mutual value positions between the researcher and researched” (p. 71) and inter-rater reliability checks as a check on the objectivity of a coding scheme was deemed meaningless by Seidel & Kellie, (1995, cited in Yardley, 2000) for researchers who believe that knowledge cannot be objective. Charmaz and Bryant (2010) suggested that credibility in GT is established through the strength of the analytic concepts and the evidence to support them. To this end quotations were widely used to demonstrate my interpretations of the raw data. I decided to conduct inter-rater reliability checks also, with the aforementioned caution in mind.

My semi-structured interview style is an area for further development. Burck (2005) highlighted the difficulty some clinicians have in making the distinction between responding as a researcher and responding as a therapist. I found it important to recognise moments when I had responded as a therapist in the earlier interviews which enabled me to monitor my responding in future interviews. Also, at times during the interviews I found myself formulating on a case by case basis as might be done in clinical work when the purpose of the research was to gain an understanding of a group.

If you were able to do this project again, what would you do differently and why?

GT was designed as a sociological research method (Glaser and Strauss, 1967) and Willig (2001) has questioned its suitability for psychological research, as when applied to questions

about ‘experience’ rather than ‘social processes’ GT can end up being used as a descriptive rather than explanatory exercise. Willig (2001) stated that this can result in a “systematic map of concepts and categories used by the respondents to make senses of their experience” (p. 47), which was the result of the present study. Although this is a useful addition to the literature and in itself can contribute towards treatment as the study intended, GT methods may not have been used as they were originally intended, particularly as the implicit theories were positioned within an existing framework and not a standalone theory. Previous studies of a similar nature used GT and this had an enormous impact on my choice of methodology. I have since considered if Interpretative Phenomenological Analysis may have been more appropriate as it aims to engage with reflections about experiences (Smith, Flowers & Larkin, 2009).

Whilst the study was being carried out another researcher published a paper hypothesising about what the implicit theories held by firesetters might be. It was difficult to distance myself from the proposed implicit theories and highlighted Glaser and Strauss (1967) reasons for advocating no pre-study literature review. Staying close to the data and ensuring all of my interpretations were grounded in the data was an important skill. In future research using GT, I would consider a briefer initial literature review.

Carrying out this study highlighted importance of conducting a pilot interview which was not done in the present study as the interview schedule was based on one designed for a similar study. However, the first question on my schedule intended to be open, put participants at ease and gain general views about fire, ‘can you tell me what you thoughts are about fire and setting fires?’ elicited defensive responses such as ‘normal ideas’ and ‘I’ve got no thoughts

about setting fires’. This question was being interpreted as ‘do you have any strange ideas about fire?’ and ‘are you going to set a fire?’ The defensive responses could have impacted on participants’ disclosure; a pilot interview may have prevented this.

It is unclear if the data truly reached theoretical saturation as is the aim with GT and whether it was realistic to aim for this within such a time limited project is debatable. Dey (1999) challenged the notion of saturation as is based on the researcher’s judgement that the properties of a category are saturated. He instead suggested the term ‘theoretical sufficiency’, indicating categories suggested by the data, which the present study achieved where categories were sufficiently developed based interpretations of the data collected.

Using retrospective accounts where there was a substantial time delay for some participants may have reduced their recall accuracy. Stating that the fire must have set within a specified time period (e.g. within 5 years prior to the study) in the inclusion criteria may have reduced this.

As a consequence of doing this study, would you do anything differently in regard to making clinical recommendations or changing clinical practice, and why?

I would hope that the results of this study will begin to provide a framework for treatment for firesetters in secure forensic psychiatric services. However, given the preliminary nature of the study, the implicit theories generated will require validation and refinement before they can be integrated into standardised treatment. Utilising the treatment framework suggested by

Drake, Ward, Nathan and Lee's (2001) may be an effective way to integrate therapeutic interventions targeting implicit theories into clinical practice.

I would hope that the results of the study will be considered more widely by professionals in the community who may make attempts to understand what is being communicated through firesetting (although further research would be required to generalise these implicit theories to other settings). For example, many participants used fire as a cry to help or because they were not coping. This may enable therapy to be provided at an earlier stage, possibility reducing the likelihood the individual will end up detained in either prison or hospital. This would however, require wider professionals to have some understandings of psychological theories which may be unrealistic for many. This could be addressed by effective multi-disciplinary team working with psychologists involved either as consultants to the staff teams or therapists to the individual in all instances of firesetting or referrals for individuals with a history of firesetting.

As for my own clinical practice, when listening back to the audio-taped interviews and re-reading transcripts I noticed that I had missed something important during the interview or misinterpreted the meaning a participant was attributing to what they were saying. This has made me be more aware in future clinical and research work to listen even more carefully to what is being said and to question meanings.

If you were to undertake further research in this area what would that research project seek to answer and how would you go about doing it?

Research of a qualitative nature with a larger sample of firesetters in order to verify and refine the implicit theories generated within this study would be an important next step. When investigating implicit theories within a social cognitive framework, analysing future data may more usefully be done using IPA (Smith et al., 2009).

It would be important to measure the effectiveness of interventions targeting implicit theories. Immediate outcomes could be measured by using the Fire Setting and Fire Proclivity Scales (Gannon & Barrowcliff, 2012), however, socially desirable responding is likely to be a limitation. Longitudinal data would be vital. Patients could be followed-up on discharge and information regarding recidivist firesetting could be obtained via self-report or the individuals' care. Both have limitations, the individual is unlikely to disclose any recidivist firesetting for which they were not charged and arrests for firesetting may not come to the attention of the care team.

The heterogeneity of firesetters suggests that the implicit theories may be held in distinct clusters by various subtypes of firesetters and research exploring if these clusters exist would be valuable. This could guide treatment further and more specifically for subtypes of firesetters. Also, an exploration of whether different implicit theories are activated at different points within the offence processes would be a valuable contribution to treatment and preventing recidivist firesetting. Gaining an offence process description and coding for the presence or absence of each IT at each stage within the offence processes would be one method of doing this.

Exploring the implicit theories held by women in secure forensic services with a history of firesetting would also be important. This study particularly acknowledged the importance of viewing women and men as distinct groups. Women have been viewed as ‘marginalised in a system largely designed for men’ (Corston, 2007, p.4) and it is important to consider that their implicit theories and resulting treatment needs may differ. For the reason, separate research is essential.

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Section D: Appendix

The Implicit Theories of Firesetters

July 2012

A thesis submitted in partial fulfilment of the requirements of Canterbury Christ Church

University for the degree of Doctor of Clinical Psychology

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Appendix 1: Search strategy for literature review

The electronic databases PsychINFO, Medline, ASSIA, Cochrane library and Web of knowledge were searched. During the first stage search terms relating to firesetting were utilised. Secondly, search terms related to the cognitive aspect of offending were utilised. Finally, a search was completed which looked at a combination of the search terms related to firesetting and the cognitive aspect of offending. These search terms were decided upon after an initial reading of the literature. No limits were applied on dates and databases were searched from the first date allowed to June 2012.

Abstracts of the retrieved articles were reviewed and articles were retrieved if they were in English and abstract indicated that one of the following was true:

- The paper was about adult intentional firesetters who did not have a learning disability.
- The paper was explanatory in nature regarding implicit theories or social cognitive theory.
- The study was an empirical paper exploring the implicit theories of any group of offenders.
- The study was an empirical paper exploring cognitive distortions of any group of offenders.

Search terms	Databases				
	PsychINFO	MEDLINE	ASSIA	Cochrane Library	Web of knowledge
1. Firesetters	131 (22)	61 (7)	2 (1)	0 (0)	18 (4)
2. Fire	4,418 (19)	4,578 (3)	104 (3)	9 (0)	1,592 (3)
3. Arsonist	24 (3)	23 (5)	29 (12)	2 (1)	205 (20)
4. Arson	346 (31)	227 (28)	29 (11)	4 (0)	844 (15)
5. Pyromania	80 (4)	69 (10)	12 (3)	0 (0)	124 (6)
6. Implicit theories	837 (16)	120 (4)	601 (3)	63 (0)	2,758 (11)
7. Cognitive distortions	928 (28)	249 (10)	255 (15)	53 (1)	1,748 (12)
8. Social cognitive theory	1,546 (10)	627 (2)	3,837 (2)	286 (0)	330 (3)
1 or 2 or 3 or 5 and 6 or 7 or 8	4 (1)	0 (0)	1,605 (8)	-	1,881 (5)

*The number of relevant papers are indicated in brackets.

A manual search of the reference lists of the retrieved papers was also carried out to look for further relevant papers in addition to a search on Google scholar.

Appendix 2: Table of existing implicit theory studies

Author/Date/Title	Offender population	Data Source	Type of analysis used	Implicit Theories identified
<p>Ward and Keenan. (1999). Child molesters' implicit theories</p>	<p>Child sexual abusers</p>	<p>Based on a review of scales used to measure cognitive distortions in sexual offenders</p>	<p>N/A</p>	<ul style="list-style-type: none"> • Children as sexual objects (i.e. beliefs that children are sexually motivated) • Entitlement (i.e. beliefs that one is superior to other subordinates) • Dangerous world (i.e. beliefs that others – usually with the exclusion of children – are inherently hostile and malevolent) • Uncontrollability (i.e. beliefs that one is unable to regulate <i>one's sexual behaviour</i>) • Nature of harm (i.e. beliefs that sexual abuse is unlikely to cause victim harm)
<p>Polaschek and Ward. (2002). The implicit theories of potential rapists. What our questionnaires tell us</p>	<p>Rapists</p>	<p>Speculated about implicit theories that may guide rapists' interactions with their victims by analysing existing questionnaire items for common themes</p>	<p>N/A</p>	<ul style="list-style-type: none"> • Women are unknowable/dangerous (i.e. beliefs that women are inherently alien to men, and difficult to predict and understand) • Women are sex objects (i.e. beliefs that women are naturally, and excessively, preoccupied with sex) • Male sex drive is uncontrollable (<i>i.e. beliefs that men's sexual energy can be difficult to control, and can build up to dangerous levels if women don't provide them with reasonable sexual access</i>) • Entitlement (i.e. patriarchal beliefs about men being in charge of women and that their sexual needs should be met on demand) • Dangerous world (i.e. beliefs that the world is a hostile and threatening place)

Author/Date/Title	Offender population	Data Source	Type of analysis used	Implicit Theories identified
<p>Polaschek & Gannon. (2004). The implicit theories of rapists; What convicted offenders tell us</p>	<p>Men serving a prison sentence for sexual violation or attempted sexual violation of a person older than 16 years</p>	<p>Offense process descriptions generated from interview with 37 imprisoned rapists</p>	<p>Coded according to presence or absence of implicit theories identified by Polaschek & Ward (2002)</p>	<ul style="list-style-type: none"> • Women are dangerous (i.e. beliefs that women are out to harm men) • Women are sex objects (i.e. beliefs that women are naturally, and excessively, preoccupied with sex) • Male sex drive is uncontrollable (<i>i.e. beliefs that men's sexual energy can be difficult to control, and can build up to dangerous levels if women don't provide them with reasonable sexual access</i>) • Entitlement (i.e. patriarchal beliefs about men being in charge of women and that their sexual needs should be met on demand) • Dangerous world (i.e. beliefs that the world is a hostile and threatening place)
<p>Beech, Fisher and Ward. (2005). Sexual murderers' implicit theories.</p>	<p>Sexual murderers</p>	<p>Interviews with 28 men serving a life sentence for a murder that was considered to have a sexual element</p>	<p>Grounded Theory</p>	<ul style="list-style-type: none"> • Dangerous world (Conceptualised in the same way as Ward and Keenan, 1999) • Male sex drive is uncontrollable (i.e. beliefs that male sexual fantasies and associated sexual urges are uncontrollable) • Entitlement (i.e. beliefs that males were entitled to sex) • Women as sex objects (<i>i.e. beliefs that women are recipients of males' sexual attention with no autonomous with preferences and interests of their own</i>) • Women are unknowable (i.e. beliefs that women deliberately mislead men causing them to feel inadequate and rejected)

Author/Date/Title	Offender population	Data Source	Type of analysis used	Implicit Theories identified
<p>Marziano, Ward, Beech and Pattison. (2006). Identification of fundamental implicit theories underlying cognitive distortions in child abusers: A preliminary study</p>	<p>Child sexual abusers</p>	<p>Interviews with 22 men convicted of child sexual abuse</p>	<p>Kruskal-Wallis analysis (examined frequency of implicit theories identified by Ward and Keenan, 1999)</p>	<ul style="list-style-type: none"> • Children as sexual objects (i.e. beliefs that children are sexually motivated) • Entitlement (i.e. beliefs that one is superior to other subordinates) • Dangerous world (i.e. beliefs that others – usually with the exclusion of children – are inherently hostile and malevolent) • Uncontrollability (i.e. beliefs that one is unable to regulate <i>one's sexual behaviour</i>) • Nature of harm (i.e. beliefs that sexual abuse is unlikely to cause victim harm)
<p>Polaschek, Calvert and Gannon. (2009). Linking violent thinking. Implicit theory-based research with violent offenders</p>	<p>23 men entering the rehabilitation program National Violence Prevention Unit</p>	<p>Transcripts of 23 participants offense process interviews</p>	<p>Grounded theory</p>	<ul style="list-style-type: none"> • Normalisation of violence (i.e. beliefs that violence resolves conflicts, persuades people to do things and that physical and psychological effects of violence heal quickly) • Beat or be beaten (i.e. beliefs that violence is required in order to attain independence and status within a hostile world) • I am the law (i.e. beliefs that one is entitled to morally judge <i>others' behaviours and administer retribution accordingly</i>) • I get out of control (i.e. beliefs they are unable to regulate their own behaviour)

Author/Date/Title	Offender population	Where data came from	Type of analysis used	Implicit Theories identified
<p>Ciardha & Gannon (2012). The implicit theories of firesetters: A preliminary conceptualisation</p>	<p>Firesetters</p>	<p>Offers a preliminary conceptual framework of the potential implicit theories that are likely to characterised firesetters</p>	<p>N/A</p>	<ul style="list-style-type: none"> • Dangerous world (i.e. beliefs that the world is a hostile and unwelcoming place where other individuals are not to be trusted) • Normalisation of violence (i.e. beliefs that violence is a normal and possible acceptable way in which to deal with other people. Violence is normalised as a method of conflict resolution or persuasion in which the negative consequences of violence are downplayed) • Fire is a powerful tool (i.e. beliefs that fire is a tool with which to send a clear message about themselves as someone to look up to, admire, fear or help) • Fire is fascinating/exciting (i.e. beliefs that firesetting is thrilling, soothing or mesmerising) • Fire is controllable (i.e. beliefs people have enough time to avoid injury in a fire and that only the intended target of a fire will be injured or damaged)

Appendix 3: Research Ethics Committee approval Letter

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Appendix 4: R&D Approval letters

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Appendix 5: Letter to responsible clinician for consent to approach patients

Dear [Responsible Clinician]

I am a Trainee Clinical Psychologist at Canterbury Christ Church University (CCCU). As part of a research project I am interested in hearing about the experiences of inpatients in medium secure psychiatric services who have set fires in the past. Please see attached information sheet.

[], who is a patient under your care meets the inclusion criteria for participation in this study and I would like to approach them to discuss this study and gain their consent to participate. I would be grateful if you would give me your consent to approach this patient for this purpose. Please could you contact me by return e-mail by [3 weeks from date e-mail was sent] with your decision.

If you have any further questions about this study please do not hesitate to contact me [redacted]@canterbury.ac.uk) or Dr. [redacted] ([redacted]@[redacted]).

Yours sincerely

[redacted]

Trainee Clinical Psychologist

Canterbury Christchurch University (Salomons)

Appendix 6: Participant information sheet**PARTICIPANT INFORMATION SHEET****People in medium secure services who have set fires, what do they tell us?**

My name is [REDACTED] and I am a Trainee Clinical Psychologist at Canterbury Christ Church University (CCCU). As part of a research project I am interested in hearing about your experiences in the past when you have set fires.

You are being invited to take part in this research study. Before you decide, it is important for you to understand why the research is being done and what it will involve for you. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if anything is unclear or if you would like more information. Take time to decide whether or not you wish to take part.

Purpose of the Research Study:

The psychological understanding about why people set fires is limited. There are currently no standardised treatment programs to help people who have set fires. In medium secure services treatment is important. So we can develop treatment programs we need to know more about people who have set fires.

Why have I been asked to take part?

All male inpatients who have set a fire in the past are being invited to take part.

Do I have to take part?

No. If you do agree to take part you will be asked to sign a consent form. You can withdraw at any time without giving a reason. Not participating or withdrawing from the study will not impact on your care and treatment at the unit.

What will happen to me if I take part?

If you agree to take part you will be invited to participate in an interview with me that will last about 45 minutes and will be tape recorded. Relevant notes in your file will also be used.

Will my taking part in the study be kept confidential?

If you take part your clinical team will be informed and a copy of your signed consent form will be placed in your ward file. It is important your clinical team are aware that you are taking part in case you want to talk to someone about it.

All information you tell us will be kept confidential *however* if you tell us something which suggests that you are at risk of harming yourself or someone else, that the unit security is at risk or about breaches of rules we have to share this with your clinical team. A written record of any information shared in this way will be kept in your ward file. This is to keep you and other people are safe.

Data will be securely disposed of once it has been used for the purpose of this study.

What are the possible disadvantages and risks of taking part?

For some people it might be upsetting to talk about times in the past when they have set a fire. Staff on the unit will be aware of your participation and if you do become upset they will be available for you to talk to. You can also talk to a psychologist if you wish.

What are the possible benefits of taking part?

Clinicians are interested in the best way to help all patients towards recovery. By participating in this research we can learn more about people who set fires and improve our understanding and treatment of patients.

What if something goes wrong?

If you wish to complain, or have any concerns about any aspect of the way you have been approached or treated in the course of this study, you can write to [REDACTED] (complaints co-ordinator) at [REDACTED] or telephone on [REDACTED]

What will happen to the data collected?

The audio recorded interview will be anonymised and then typed up (transcribed) by the researcher. You will not be identified on the recording or on the transcribed interview. The audio recording will be destroyed once it has been transcribed. The transcribed interview will be kept for 10 years in a safe, locked place. Any documents that could identify you will remain at the unit.

What will happen to the results of the research study?

The results of this study will be used to write an independent research project as part of the Doctorate in Clinical Psychology at CCCU. Articles may also be published

in mental health journals. Anything which is published will have no names or other information which could identify you.

Who has reviewed this study?

All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given favourable opinion by [REDACTED] Research Ethics Committee.

Contact point for further information:

If you would like any further information about the research study, please contact [REDACTED] (Clinical Psychologist in Training) or [REDACTED] (Chartered Clinical Psychologist), via your primary nurse.

Thank you for taking the time to read this information sheet

Appendix 7: Consent form

CONSENT FORM

People in medium secure services who have set fires, what do they tell us?

- 1) I confirm that I have read/had read to me and understood the information sheet for the above study and have had the opportunity to ask questions.
- 2) I understand that my participation is voluntary and that I can withdraw at any time. I understand that my care and treatment at the unit will not be affected.
- 3) I agree to take part in the above study. I understand that interviews will be tape recorded and that only information relevant to the study will be collected from me and my medical records, and will be made anonymous before transfer to the central database. This information will only be available to people directly involved in the research.
- 4) I understand that sections of my medical notes relevant to the study and data collected during the study, may be looked at by individuals at Canterbury Christ Church University, from regulatory authorities or from the NHS Trust. I give permission for these individuals to have access to this data.
- 5) I understand that my clinical team and the visiting GP will be aware of my participation in this study.
- 6) If, during the course of this research I lose the capacity to consent to participate, the researchers can use any data already collected as part of this study.
- 7) I would like a summary of the results once the research has finished.
- 8) I understand that if I disclose information that suggests that I am a risk to myself or others the research team must inform my clinical team in writing. If I tell the research team anything that suggests hospital security is at risk, about breaches of hospital rules, or any intentions of absconding, the research team will also need to inform my clinical team in writing.

NAME OF PATIENT

NAME OF RESEARCHER

SIGNATURE DATE

SIGNATURE DATE

Appendix 8: Letter to responsible clinician informing about patients participation

Dear [Responsible Clinician]

I am a Trainee Clinical Psychologist at Canterbury Christ Church University (CCCU). As part of a research project I am interested in hearing about the experiences of inpatients in medium secure psychiatric services who have set fires in the past. Please see attached information sheet.

[], who is a patient under your care met the inclusion criteria for participation in this study and after consultation with you was approached to participate.

This letter is to inform you that [] has consented to participate in this study. A copy of their consent form has been placed in their medical file.

If you have any further questions about this study please do not hesitate to contact me ([]@canterbury.ac.uk) or Dr. [] ([]).

Yours sincerely

[]

Trainee Clinical Psychologist

Canterbury Christchurch University (Salomons)

Appendix 9: Letter to GP informing about patients participation

Dear [GP]

I am a Trainee Clinical Psychologist at Canterbury Christ Church University (CCCU). As part of a research project I am interested in hearing about the experiences of inpatients in medium secure psychiatric services who have set fires in the past. Please see attached information sheet.

[], who is a patient at the [] met the inclusion criteria for participation in this study and has given their consent to participate.

This letter is to inform you about this patient's participation in this research study.

If you have any further questions about this study please do not hesitate to contact me ([]@canterbury.ac.uk) or Dr. [] ([]).

Yours sincerely

[]

Trainee Clinical Psychologist

Canterbury Christchurch University (Salomons)

Appendix 10: Interview schedule**The Implicit Theories of Firesetters in Medium Secure Psychiatric Services**

Interview Schedule

1. Can you tell me what your thoughts are about setting fires?
2. Can you tell me roughly how many fires you have set in the past?
3. Can you think about the time you set that fire, or if you have set a number of fires, can you think about the one that stands out most in your mind.
4. Can you tell me what was happening in your life in the months leading up to you setting the fire?
5. Can you tell me what happened in the days before you set the fire, right up until it happened?
6. Can you tell me what happened when you set the fire?
7. What happened afterwards?
8. Was this what you expected to happen?

If the participant has set a number of fires:

9. Was this experience similar to the other times you set fires?
10. Can you tell me in as much detail as you can about the other times you set fires, what happened before, during and after the fires and what you were thinking and feeling at these times.

At each stage of the interview, the interviewer must enquire about the cognitive, affective and volitional state of the participant with questions such as ‘what were you thinking at this time?’, ‘how were you feeling at this time?’, ‘what made you make the decision you did at this time?’.

Appendix 11: Research diary excerpts**January 2010**

Attended the research fair. There were some interesting ideas for research, but none that really personally caught my interest. I'm particularly interested in conducting research in forensic services so I will arrange to meet up with a previous supervisor (LL) who works in forensic services to discuss this.

February 2010

Met with LL and discussed potential research projects. She told me that there is currently a lot of research happening at the unit with firesetters and this may be an area worth considering as there is not very much research in the area and it would fit with the unit's current research agenda. Because lots of other people are researching in this area at the unit I would be able to get a lot of support and be part of a wider research group. LL provided me with the name of another psychologist (TG) at the unit who is currently conducting research with firesetters and recommended I have a discussion with her as firesetters is not LL's specialist area of expertise.

February 2010

I emailed TG and today she replied with some really helpful comments and identified firesetters cognitions as an important gap in the literature to be filled. She is in the process of publishing an up to date literature review about firesetters and sent it to me so I could gain an overall idea about the existing literature in this area and identify the gaps so I find a focus for my research.

May 2010

I have found that the psychological understanding of why people set fires is limited and I think that this could be an important area to research. I am considering exploring personality, anger, cognition and self-esteem in firesetters and comparing their scores on standardised measures completed by patients at admission to scores obtained from non-firesetters within the unit. This data is readily available at the unit and would therefore not present recruitment problems.

November 2010

I attended the peer review at Salomons to discuss my research proposal. The study as it stands does not appear feasible and the panel questioned the clinical utility of the research and considered it a small project as I will be using existing data that I have not collected. I will spend some more time thinking about research that may have more clinical utility, but I am still interested in doing research with firesetters.

November 2010

I have been reading over the literature on firesetters and previous research conducted by TG and considering research that has been done with other offender groups but has not yet been conducted with firesetters. I have found that research has been conducted with other offenders groups looking at cognitive distortions and implicit theories. I emailed TG with my idea to see what she thought and she considered it an important, yet untouched area of research with firesetters. This email, along with my reading of the literature helped me to decide that this is that area of research I will not pursue. It felt enormously helpful to add the opinion of somebody currently researching in this area that is very clear on the gaps that need filling in the literature and what would be of most importance clinically.

March 2012

I have been completing my REC form this month. I have completed one before, but I forgot just how thorough they are and it really made me consider the ethical aspects of my research. I am thinking back to previous research that I conducted with forensic psychiatric inpatients and remembering just how difficult participants were to recruit to research. They had little motivation to take part and there was very little incentive for them. This is making me consider if I could offer them an incentive to participate.

I have discussed this with my supervisor whose opinion is that no incentive should be offered. Partly as only selected patients could participate and it was her opinion that I shouldn't offer tea and biscuits as the hospital try very hard to promote healthy eating and the medication many patients are on impacts on their weight and general health and is generally not encouraged by the unit. Also, caffeine intake is limited for some patients. Also, some research happens 'in-house' and patients are requested to complete measures at admission and pre and post group interventions. No funding is provided to the unit to offer incentives for completion of measures/interviews on these occasions and this could have a negative impact on the wider research agenda of the hospital and patients completing important measures to evaluate their own progress and the effectiveness of interventions.

19th May 2011

The ethics committee was held today and considered by study. I was unable to attend. An unfavourable ethical opinion was received. They were particularly interested in ensuring there were provisions under the mental capacity act for those who may not be able to provide informed consent, considering distress the participants may be under doing the research, confirmation regarding the status of inpatients (prisoners or patients) and the reason or the exclusion of females.

This made me think about my project in a new light and consider these issues which are very important, yet I have not previously considered in

enough depth. I will consider these issues in more depth and resubmit.

18th August 2011

The ethics committee was held today and considered the resubmission of my study. They wrote to me with a provisional opinion letter asking for additional clarification of some issues and some additional information. They were particularly keen for me to write to the visiting GP of the site where I conduct my research to inform them about participation. They were interested in further discussion ensuring there was no coercion to participate and that it was important that I as the researcher approached potential participants and not staff as they may participate with the idea this will look favourably upon them and aid their progression through the unit. The request for the visiting GP to be informed about participation initially seemed unimportant to me as they have very little input into patient care. After further thought it made me realise how inpatient units often function very independently of other services and that in itself could carry risks and ethical issues and the committees request to inform the visiting GP of participation seemed to be a valid one.

30th August 2011

I received a provisional opinion letter today from the REC. They were keen to ensure that an honorary contract was received for all sites and that SSI's were also applied for. 'Getting through' the ethics committee is proving a very difficult task and the work and paperwork required is enormous!! Despite this, it has made me think very carefully about all of the ethical aspects of my research with a group who are detained under the Mental Health Act, against their will and about how within this context they consent to and participate in research.

September 2011

I have been writing my Section A. I am surprised at how neglected research has been with fire setters and how it is assumed that generic offending behaviour programs will be helpful with no specialist aspect for firesetters. There are lots of attempts to classify firesetters according to their motivation for setting fires and considering their demographics. Whilst this is helpful, it limits the knowledge professionals have when considering treatment. It has made me think back to working in forensic services and firesetting and arson was not really thought about as separate. Risk for arson was considered on an HCR-20 given the patients history, but there was little further thinking about firesetters. It has made me realise clinically, how neglected this area is.

2nd November 2011

I received a favourable opinion from the ethics committee today. I now need to ensure that R&D has all of the relevant documentation to approve my study.

16 December 11

R&D approval was received today. I can now begin considering data collection

February 2012

I am becoming aware that I need to begin data collection soon. It seems as though other aspects of the course keep taking priority and my MRP is slowing down. I received some feedback about my section A from my supervisor and overall he is happy with it. Time to get by head back into my MRP and press on with data collection and analysis.

March 2012

TG emailed me with a paper she is about to submit for publication. She is hypothesising about what the implicit theories held by firesetters might be. Initially this made me feel very anxious and question the worth of my study when someone so eminent and immersed in this field of research is publishing about exactly the same thing! I e-mail her with my concerns. Her opinion was that her paper was about implicit theories she proposes based on her clinical experiences and it is not grounded in data. She considered it important to have this research grounded in data too. Also, she is not considering firesetters with mental health problems and there may be some differences.

This made me consider if I should change my research and look for the implicit theories she suggested in my data as other researchers have done when others have previously generated implicit theories. After a discussion with my supervisor it was felt to be important to continue with my research project as it is grounded in interview data and it is important to approach this with an open mind given the dearth of literature out there.

26th April 2012

I plan to begin recruiting participants today. I thought before I begin this process it would be a good idea to spend time thinking about what I will bring to the data collection and analysis aspects of the research. I have some experience working as an assistant psychologist/research assistant in secure psychiatric inpatient services so I feel relatively comfortable with this group of people. During my work, patient's histories of firesetting were not really thought about at great length and there were no specific treatment programs available.

The only experience I have of working with people who have set fires is as a support worker in the community prior to clinical training. One person set fire to some clothes she left in front of a fire by accident. The other was a man who had a history of firesetting and when his mental state deteriorated he would attempt to leave piles of clothes outside the staff office to set fire to. These experiences, particularly the second experience made me think about just how dangerous fire it. At the time I was thinking of it as uncontrollable and deadly. This may impact on my understandings of stories about firesetting and might make me think about the safety of others, more than another researcher might. I also

became aware of how difficult it is to gain housing if an individual has 'arson' attached to their record. This was the case for the lady with the accidental fire. It made me realise just how seriously authorities take firesetting and how once you have firesetting on your record it never leaves you. At the time this left me with feelings of frustration towards the system for not helping people who had made mistakes more forwards.

I am aware that as a white, 30 old female interviewing men in secure psychiatric forensic settings this may impact on the interaction in different ways than if I was male, of a different ethnicity or age. I am unsure about how this will impact, possibly participants will be more open with me as I am female, however, they might interpret me as young as I will be telling them that I am still training and they may think that I don't know what I am talking about and either not participate at all or limit the story they tell me. I plan to spend time reflecting after each individual interview and think about what I am bringing to the interview process.

I am also aware I am interviewing men in a secure setting. One which at times can be noisy and disruptive. However, the participants are used to these surroundings and used to having meetings in rooms just off the ward where I intend to carry out the interviews so the impact of this setting should be limited.

4th May 2012

Interviewed Participant A today. He was telling stories of police being violent to him when he did nothing wrong. Told in a macho way, not a vulnerable way. Told stories of liking having a laugh and joke with women, some of which sounded inappropriate but he was completely appropriate with me. He questioned my age at one point, assumed I was young and would not remember a particular TV show. Appeared keen to tell his life story, especially the injustices. His affect was incongruent with what he was saying, he was laughing a lot, event at parts of his story that sounded traumatic. He was showing off knowledge of the system, perhaps attempts to redress the power balance between himself me. I checked for clarification on things (e.g. what's a PO?) to redress this balance. A swore a lot throughout our interview. This could be about him managing how he came across socially. This added masculinity to a story of vulnerability. A spent a lot of time in prison where you can't be vulnerable. He stopped swearing towards the end when he had finished telling stories in which he could be perceived as vulnerable and powerless. He said 'you know what I mean' a lot. This could be him seeing difference s between us and him checking I understood. I found myself saying 'yes' quickly and often even if I didn't really know what he meant as I didn't want to come across as a white middle class researcher without a clue. This stunted me exploring some of his experiences further. The story at times felt disjointed and difficult to follow (e.g. 'I was in seg, I'm not sure why'). This could be him covering something he did wrong as he was keen to present himself to me as staying out of trouble whilst in prison or a particularly vulnerable time in his life (he talked about feeling suicidal and attempting to kill himself on a couple of occasions) that he didn't want to acknowledge. He talked about being able to have a laugh and a joke with females better than males. This could have resulted in him being more open with a female researcher than a male researcher.

4th May 2012

Interviewed Participant B today. He appeared keen to get across how desperate he was at the time and the danger associated with fire. He appeared worried about being judged. Before the interview he talked about planning for the future. Perhaps this made the past easier to talk about. He talked about his family and told me that he had a 'good mum', perhaps a fear of his family being judged. He talked about how he had skills now that he didn't have then. Maybe reassuring me that there will be no future fires. B spent time talking about science and philosophy, perhaps redressing the power balance between himself and the researcher. B was keen to know who I was, asking 'are you a student?'

4th May 2012

I have been trying to recruit more participants today and have realised that it is going to be difficult to get enough participants from this one site. Patients identified as firesetters have been denying they have ever set a fire and others considering it too distressing to talk to me about. I met with my supervisor today to discuss this and she suggested that I extend my research to the low secure part of the hospital and recruit from there. I telephoned the senior psychologist at the site who is happy for me to recruit from there one I have R&D approval and ethics approval.

I sent an e-mail to the REC asking what I would need to do to add a site. They told me that as it's a minor amendment they can make the amendment and I can begin data collection once I have R&D approval.

I have today emailed R&D and await their approval. This feels like quite a big change to my planned project.

10th May 2012

I interviewed participant C today. He was unable to distinguish between what were voices and what were his thoughts at the time of the fire. He has been in an institution including high secure services for a long time. He is likely to be used to professionals asking him questions in that setting. Appeared to be a story he knew well, and had thought about a lot, maybe as a result of attending so many group programmes to think about offending. The story didn't quite feel rehearsed though, more a genuine, thoughtful account. Fire setting was in the context of hiding evidence of a more serious crime; therefore it possibly has less significance for him. C told me that he was never charged for the firesetting incident. The interview was quick, only 10 minutes although didn't seem to be holding back anything.

10th May 2012

I interviewed Participant D today. It felt like he told the story with his own motivations as he felt like ‘trumped up charges’ had been made against him. Before the interview he asked where my university was. When I told him he responded ‘oh very posh’. This may have influenced what he told me and how as he viewed me as someone going to a university in a posh part of the country. He appeared to add a masculine side to a story about vulnerability. He talked about how he can handle his whiskey, how he came out on top (although he couldn’t explain how) and about how if men in prison started on someone with broken ribs then they must have ‘peas for brains’.

12th May 2012

I have begun analysing the data so far! It is making me realise just how much data a qualitative study produces! The stories I have been told so are all really different, not really what I was expecting, but an interesting surprise. I will carry out further analysis on this data before I carry out the next interviews. I already have some ideas about how I want to amend the interview schedule.

14th May 2012

I visited the low secure site today to recruit more participants. I spoke to two potential participants. One agreed to meet for an interview. One asked that I come another time to talk to him about it as he was drowsy from medication.

15^h May 2012

I telephoned R&D today and they confirmed that I have approval to recruit from the additional site. They confirmed a letter is being sent in the post detailing this.

17th May 2012

Interviewed Participant E today. It felt like a very honest account, even adding information about fires he didn’t mention at the beginning at the end. This could have been because trust and rapport had developed by this point. He asked me at the end how many people I’m speaking to, this could be to see if he is identifiable, to see how much help I really needed with the research or to check he hadn’t been missed. We were of the same ethnic group which showed some likeness between us, and I’m not clear what role, if any gender played in this interaction. He was a very softly spoken man, used to spending time in hospital, possibly with female nurses and psychologists which could have increased his comfort speaking to me.

17th May 2012

I interviewed Participant F today. Prior to interview he told me that talking about his firesetting was upsetting. This probably impacted on how I was during the interview and tried to be particularly careful. He also told me about his daughter who is at university and this may have impacted on his decision to speak to me about such a difficult topic. It is likely his daughter is only a few years younger than me. This made me think about how he saw me and the story he told me as he told me he was very regretful for how his firesetting has impacted on his daughter.

17th May 2012

I interviewed participant G today. This was the first Asian man I spoke to about firesetting; in fact it was the first man who was not White British! He made a point of the firesetting being no big deal really. He appeared happy to talk to me, we are of a similar age and it made me wonder if this made it easier to talk to me, or more difficult. We are of a similar age yet I am studying and he is detained in a secure hospital, it made me feel uncomfortable. It made me think about cultural differences between us and whether despite our age similarity whether this difference made him view us as worlds apart. Living in London I am used to living with people from mixed cultures. This man was in a secure unit in a rural area and likely to be a minority in the community and definitely was on the ward. Maybe he's used to being around people who are mainly White and British. It also made me think about how his community may view him being in a secure hospital and prison, whether this brought shame on him and if this may have impacted on the story he told me.

24th May 2012

I met with another participant today to carry out the interview. After about 5 minutes of interview it transpired that he had not set a fire as an adult, only as a child. This meant that he no longer fitted my inclusion criteria so I had to terminate the interview. It highlighted the difficulties on relying on people to identify a sample for you when the sample is so small and select. It also made me realise that I didn't get enough clarification from this participant about his firesetting when he signed the consent form.

24th May 2012

I met with participant I today. It felt like he had some of his own motives for engaging, he has to do some psychology work to get out. I made it clear that I was unconnected to the unit. He seemed aware I was young, particularly during consent; he commented that he probably set his fires before I was even born. He spent a lot of time going off on tangents and I found it difficult to focus the interview. His social skills were not good, he told me he's been in institutions for 32 years and I didn't feel as prepared for this as I should have. From experience I know that many offender experience cognitive difficulties; this was likely the case with him and was not something I had put a lot of thought into prior to the interview. The open questions didn't seem direct enough for him and it took quite a large proportion of the interview for me to realise this and ask some more direct questions.

25th May 2012

I met participant J for an interview today. He spent a lot of time considering if he wanted to participate and prior to the interview talked about having to be careful about what he said to me as it could prevent him getting out. Despite me assuring him that I was external to the unit, it was difficult to establish the trust with him. A lot of time was spent establishing rapport, he was telling me about his interest in motorbikes. He began our session crying as he is on so much medication that is making him feel bad and this made me anxious about the interview, however, he didn't cry during the interview. During the interview he talked about setting fire because he wanted to die, but would then say he was grateful for being rescued by the fire brigade, so it sounds more like it might have been a cry for help.

J told stories of fighting the police and putting his hands in boiling water in prison to make them harder to hit prison officers with. This could be J adding more masculinity to a story of desperation and attempted suicide. He also told a story about helping his ex-wife when she was having a 'nervous breakdown'. This enabled J to show himself as a helper and not just helpless.

3rd June 2012

I have been thinking today about the model the implicit theories I am generating might fit into. I'm finding that I keep coming up with an offence process model as I have gained an offence process description from my interview schedule and I'm finding it difficult to deviate from this. To use an offence process model I think I would need to know where in the offence chains the particular implicit theories are activated and I don't have this information in my data.

I think that the implicit theories fit neatly into a social cognitive model; however, I'm not sure if I can use an existing model and adapt it with grounded theory.

4th June 2012-07-05

I have this week booked off as a study week. It has given me a really good opportunity to really immerse myself in the data and think deeply about the analysis and what it means. I have found myself thinking about the implicit theories proposed by TG and I'm trying to distance myself from them. I am finding it really important to keep the analysis grounded in MY data and not be swayed by what TG proposed as I am finding implicit theories not previously suggested.

5th June 2012

Coding Ed's transcript today. He talked about how he set fire to a car and 'knew it wouldn't spread'. This immediately made me think that he was underestimating the dangerousness of fire, because I would assume it would be really dangerous. I had to think, is this him underestimating

how dangerous fire is, or me overestimating how dangerous fire is. I spoke to someone else about this (male) and asked then how dangerous they thought setting fire to a car was. They told me that they think it is dangerous too, petrol could make the car explode or a gust of wind could make the fire spread maybe to other cars parked close by or trees. This made me really think about how the results of this study are very much a social construction of both myself and the interviewee and how much my interpretation of events and fire would impact how I code the data.

8th June 2012

Had a meeting today with my supervisor to discuss the model for the grounded theory. He pointed out some parts which were not clear, which now looking back I can see were a bit ambiguous. We discussed the 'fit' of the implicit theories into the social cognitive model and he feedback that it seems clear and a good model to used to show where implicit theories might fit in information processing. We talked about validity checks. My reading of the literature suggests for a social constructionist grounded theory neither inter-rater reliability checks for participant checks are of benefit. My supervisor recommended some validity checks and suggested inter-rater reliability checks may be the most beneficial. He recommended that I take a number of phrases from my transcripts and ask another coder to indicate which category they think they fit into and they look at the percentage of agreement.

20th June 2012

I have today made some amendments to my categories and subcategories. When conceptualising 'violence is expected' subcategory which is part of the category 'Dangerous world' I was finding that conceptually it was similar to 'violence as a way of life' subcategory of the 'violence is normal' category. I was finding it difficult to make a clear definition between the two subcategories. This provided me with the information that conceptually, these subcategory are too similar to be defined separately. The 'violence is expected' subcategory, and 'violence as a way of life' subcategory have now been amalgamated into 'violence as a way of life' subcategory of the 'violence is normal' category. This enables 'dangerous world' category to be purely about people and their malevolence and not about violence, enabling a clearer distinction.

It has made the question how useful 'dangerous world' is now as a label for the category and should possibly be renamed 'malevolent world'. This is something I will think about.

29th June 2012

I handed in my first draft of my section B to my supervisors today. It will be good for someone a bit more removed from the research to read it as I have been so involved in it that it is difficult to read it as someone who knows little or nothing about firesetters would (i.e. the examiners). I think it will also be good for me to have a few days away from it so I can attempt to look at it with fresh eyes in a week.

Appendix 12: Memo excerpts

The reference ‘Letter-number-number (e.g. A-6-18)’ refers to:
Participant assigned letter – page on the transcript – line number

Memo: 12th May 2012

Surviving:

‘Surviving’ seemed to be a really important concept and it really diverse. Surviving is about physical survival ‘fight or flight’, for example if someone comes up to you with a knife.

A-6-18 ‘like a fight or flight, I said, ‘so I can’t I can’t attack that person or try to disarm him’, ‘well you could do but you’ve got to think about it and all’’

Survival is also about emotional survival and coping (e.g. A fellow prisoner supplying you with cigarettes A-11-7) and providing this for others at whatever cost (e.g. going special sick to provide cigarettes to another person A-9-10). Survival is also about having people on the outside (e.g. writing to a girl from prison A-13-12). Maybe this is about people on the outside still knowing you’re alive – surviving)

Survival was also about ‘coping’ in the world ‘I couldn’t cope and no one was looking after -- I wasn’t looking after so I just set fire to the curtains. It was a cry for help’ (B-6-20)

Participant B talked about ‘survival of the fittest sort of mentality’ (B-6-3)

There is clearly something about trying to survive, but it being easier if you have other people to help you to survive

Memo: 12th May 2012

Redressing power difference:

Much of the story told by participant A is about redressing differences in power, (e.g. mocking prison officers ‘what are you in fancy dress?’ A-13-17), ‘medical officers, like it’s just a screw with a white jacket on’ A-14-19), talked about aged psychiatrists, sacked psychiatrists. A queried my age. There was a sense that for this participant they experienced a lot of powerlessness and they were trying to redress this with their actions (violence, fire, words).

Memo: 12th May 2012

What are the conditions under which specific actions, intentions and processes emerge and are muted?

Violence, verbal abuse, fire setting occurs when the individual has no autonomy, privacy, foundations. As long as the individual can be disruptive they will, until they point they can no longer (e.g. being in a body belt). For some it was as though for as

long as they could be disruptive, they would be.

‘I was just rebelling from everything’ I-9-6

‘They went ‘well get up then’ and I said ‘how the fuck am I going to’, you know, so they lift me up’ A-16-20.

Memo: 12th May 2012

Life spiralling downwards:

This seemed to be an important theme in all interviews. Participant A talked in depth about how things in his life were getting worse and worse prior to the fire and fire was a way of showing his unhappiness with the situation. He also commented that the fire in fact made things worse.

After the fire participant B’s life continued to spiral down for a period of time, but then after about 8 months in prison he ‘got help’ (B-15-20). At this point his life appeared to turn around and the consequences of the firesetting had a positive impact on his life.

- Positive and negative consequences of firesetting -

Memo: 12th May 2012

Blowing things out of proportion:

Could this be an in-vivo code/category? Refers to response to fire and other incidences such as violence in Participant A. G talked about being surprised at the response of others to his firesetting and J was surprised at how seriously the police took firesetting. This seems to be a really important part of the story.

Memo: 12th May 2012

Deserving:

Participant A talked about what was ‘deserved’. He spoke to violence as being an acceptable punishment if you had done something wrong and ‘deserved it’ (A-20-22). There was talk about deserving and not deserving to be on a psychiatric ward and older institutions.

Memo: 13th May 2012

When does and doesn’t fire setting occur:

Participant A:

The conditions under which fire setting occurred (e.g. being moved, beaten, suicidal, no control) appear to be similar conditions to after the fire setting. What stopped him doing it again if it was about conditions? Did he become more unwell? Was he observed more (talked about suicide nurses), did he realise it only made his situation worse?

Participant B:

For B, he set the first fire and there was no action. The conditions were the same when the second fire was set. Although time-wise, I'm not sure how far apart they were. Why if it made no difference the first time did he try again? Desperation? Could think of no other way to get his point across as he felt as though he had tried everything?

Having no control over life seems to lead to firesetting along with desperation and fire being a last resort.

Memo: 13th May 2012

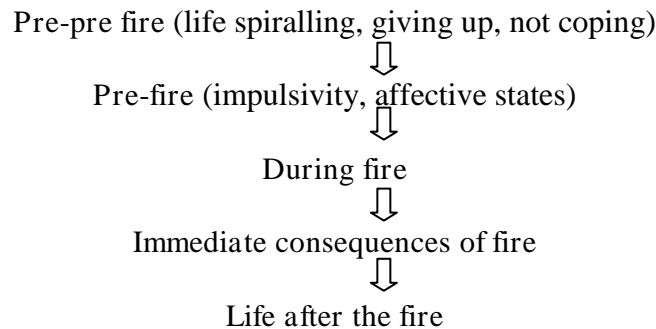
Being alone:

Participant B:

B told a story of being alone. Being expected to cope by himself (by his father/services) and being unable to do so. He talked about being left by a social worker and by his mother, both of whom appear to have been quite significant people. He talked about 'lack of care in the community I think' (B-7-8) 'there was no love in the neighbourhood, there was a bit of friendship and people sort of, I was just lonely' (B-13-3).

Memo: 13th May 2012

The model:



Memo: 17th May 2012

The model:

I did some further thinking about the model. Although the model I suggested is interesting, this is more presenting an offense process description rather than actually getting at the implicit theories. Bear this model in mind, but it's not for this paper.

Memo: 4th June 2012

Types of model

For the model I could hypothesis about:

- 1) Which implicit theories come where in the offense process
- 2) Which implicit theories are held by which type of firesetter

Memo: 4th June 2012

Dangers of fire

There is clearly an awareness of the dangers of fire, and this could be why it's used as a tool. Participant F knew well about the dangers of fire and used it to scare the police (F-15-12). Participant G knows how dangerous fire is but thinks he is in full control of it (I-7-19). Participant A didn't actually talk about the dangers associated with fire; he was probably the most impulsive, with the most criminal background and talked about experiencing violence and being violent to others so fire may have just been another means.

There are some who clearly know the danger of fire and this is why they used it. Some participants think they have complete control of fire (is this why they use it?). Violence is common for some, is fire just another form of violence?

Memo: 4th June 2012

Dangerous world/the world is a hostile place (category?)

Participant C talked about not coping, not feeling part of the human race and therefore difficult to survive (C-11-20). Participant A talked about literally living in a dangerous world. Participant D talked about his mental illness making the world a dangerous place for him to live in (D-4-23). Participant B talked about no one caring, being alone and therefore the world being a hostile and dangerous place (B-7-8).

This category covers hostility and danger in the form of violence and in the form of people doing things (or not) to be harmful.

Memo: 4th June 2012

Where does mental illness fit?

For some participants mental illness appears to be a way of absolving responsibility:

'Well, I've got bipolar and in a court of law, there was no forensic evidence of fire being started' (F-2-1)

The impact of the mental health system and medication appeared to place a role in firesetting. E set a fire because he wanted to get in his house. He wanted to get in so desperately because he was on so much medication it was difficult for him to leave the house and when he did he locked himself out:

'I think I was just in a mess of medication which ... I was in such a mess at the time, medication was such a mess' (E-6-4)

For others it was clearly part of the offence, such as for participant D who set the fire based on the delusional beliefs he had at the time:

'it was different stuff in the house and I thought someone had just sort of stolen my house, stole the house that I used to live in' (D-4-16)

For others, such as participant G mental illness played no part

Does the mental illness therefore exacerbate existing implicit theories and make them more likely to be primed? Implicit theories are likely to continue to develop whilst in prison or hospital. What does this do to the implicit theory? For example, at the time of the fire, Participant B believed that nobody cared about him, and this is one reason for setting the fire?

Memo: 4th June 2012

Possible adaptation to the research

Should I look for evidence of TG's implicit theories and look where they come in the offense process? Should I look for evidence of TG's implicit theories and which type of firesetter holds them? Are they likely to be different for firesetters in psychiatric services when most research has been done in psychiatric settings anyway? `

Memo: 4th June 2012

Consequences

There has been a lot of talk about not thinking or caring about the consequences. Some participants seem to be aware if the fire could hurt others (nobody tried to hurt somebody else with fire). Nobody planned fire, a premeditated fire; they were all impulsive acts.

It's not about feeling out of control, more about the only way to deal with the situation and therefore the consequences not being important. Is this different to a hostile and dangerous world? They set the fires because they see the world as hostile and dangerous, the implicit theory here could be '?'. It's not just about living to today as many set fire to change future situations. Could it be part of hostile and dangerous world, others don't care and therefore they cannot be held responsible for the consequences as if others cared it wouldn't have happened in the first place? There's something about each of them being alone, trying to survive, fire was set at the absolute levels of desperation. Part of 'fire is a powerful tool' implicit theory? There is more to it? These people really did not think about the consequences of such a dangerous act. Some thought they could control a fire, some didn't think about this at all.

Memo: 4th June 2012

Being alone/different to others/not fitting in

Participant D talked about people being copied and therefore different. Participant C talked about not feeling part of the human race. Participant A talked about other people who are mentally ill as different to him. Most talked about not being an arsonist, does this make them even more different to others? Participant F talked about not being himself.

Memo: 4th June 2012

Firesetters who have been in prison a long time compared to those in hospital

There is something different about the firesetters that have spent a long time in prison compared to those who have spent a long time in hospital. Those who have been in prison (e.g. A, D and J) have been much more violent (in prison mainly), and quite proud to talk about it, maybe it's about survival, showing you're not weak. How could this have impacted on their implicit theories? Their dangerous and hostile world implicit theory may be more about seeing the world as violent and giving of violence, others who have not been in prison (i.e. B and E) appear to have set fires when something has been absent (e.g. Care, medication). Has prison impacted on their implicit theories, or did they already have this implicit theory, developed in childhood, which is why they were in prison in the first place. Only 2 (so far) participants were charged with arson, both very quickly moved to hospital, spending only a little time in prison.

Memo: 5th June 2012

Fire is powerful

There are a number of aspects to this. Problems solving is one aspect (e.g. participant C, E and G) used it to burn ID, get through a door, call for help, get a car removed and help with sleep. Whereas others (e.g. Participant A, B, D, F, I and J) used fire to send a message of either needing help, inciting fear, or expressing anger. Does this divide this into two categories i.e. fire is a powerful tool for communication and fire is a good problem solving strategy. Some people (A and I) said they didn't know why they set the fire. Could they be using one of these implicit theories, just unconsciously as implicit theories are not readily articulated.

Memo: 5th June 2012

Firesetters as unassertive

The literature suggests this is the case and therefore firesetting is used rather than violence. Many participants did not fit this profile and had been prolifically violent in the past. For these individuals it seemed that fire was used when violence couldn't be. For example for participant A:

A-23-1

Interviewer: A way of showing people around you that you were angry?

Participant A: Well there was no one there but me, you know what I mean; I'm on my own in the cell, erm...thinking about it in hindsight.

Participant I

I-20-3

Interviewer: Something. What had stopped, what do you think made you chose fire, rather than other people; if somebody annoys them they might go and punch them or shout at them or do something.

Participant I: Well you can't do that on your own can you, like in a room like this.

The literature talks about firesetters having less control over their lives. This was the case for many participants. Many were in prison (A, G, I) or hospital (J).

Those that were in the community were unable to affect a change in their life that they wanted, B needed help, and others were losing control of their life; C stabbed someone and needed to burn ID, D's mental health was deteriorating and he needed money, clothes etc, F's mental health was deteriorating, E needed help, the effects of the medication were negative on one occasion and on another he was homeless and in physical danger.

Memo: 5th June 2012

‘Arsonists’

There are negative connotations with being an arsonist. Many participants talked about not liking arsonist, or not being an arsonist. There appears to be the idea that arson definitely will hurt others. This is interesting as all of the participants have a history of criminality, nearly all with a history of violence. Maybe it's about with physical violence you are there to face it and only the intended person gets harmed, whereas with arson, the arsonist rarely hangs around, can remain anonymous and can hurt people who are not the intended target. Arson may be seen as more cowardly for these reasons. Are these the same people who are surprised at the serious consequences of arson such as participant A? He didn't give any opinion on arson or arsonists. There appears to be a division: 1) people who don't like arsonists and know the damage fire can do and those who are surprised at how seriously arson is taken (??).

Memo: 5th June 2012

Accountability

This could be a category. It's about accountability for firesetting. The participant is usually blaming something or someone else for the firesetting. Participant B blamed healthcare professionals and society for not caring enough when he needed help, participant D blamed whoever copied his teddy bears and E blamed his medication and result of being sectioned. It's about not being able to really be held responsible for the fire as if someone else had done something different they would not have needed to set the fire in the first place. This could be the reason that often firesetters did not think about the consequences as they could not be held wholly accountable for them anyway. There are many excuses within this implicit theory, these are likely to be the cognitive distortions being verbalised, such as justifications.

Perhaps being diagnosed with a mental illness fits within this implicit theory too. It reduces accountability, for example one of the first things F told me was that he has a diagnosis of bi-polar.

Memo: 6th June 2012

Powerlessness

There is much talk about powerlessness. Participants who were in prison talked about

having little ability to influence their world. They often behaved in ways to try to redress this difference; firesetting could be one of the techniques they used. Could it be linked to being in a dangerous world and feeling powerless, exacerbating this.

The fire for some is to stop the dangerous world. For example B set fire to curtains to stop his situation that he himself was powerless to change. Could it be part of fire is powerful? This addresses their feelings of powerlessness by using something so powerful.

Memo: 6th June 2012

Consequences of fire

For some the consequences were positive and for some negative. For those with the positive consequences this justifies the use of fire to solve the problem/send the message.

Memo: 7th June 2012

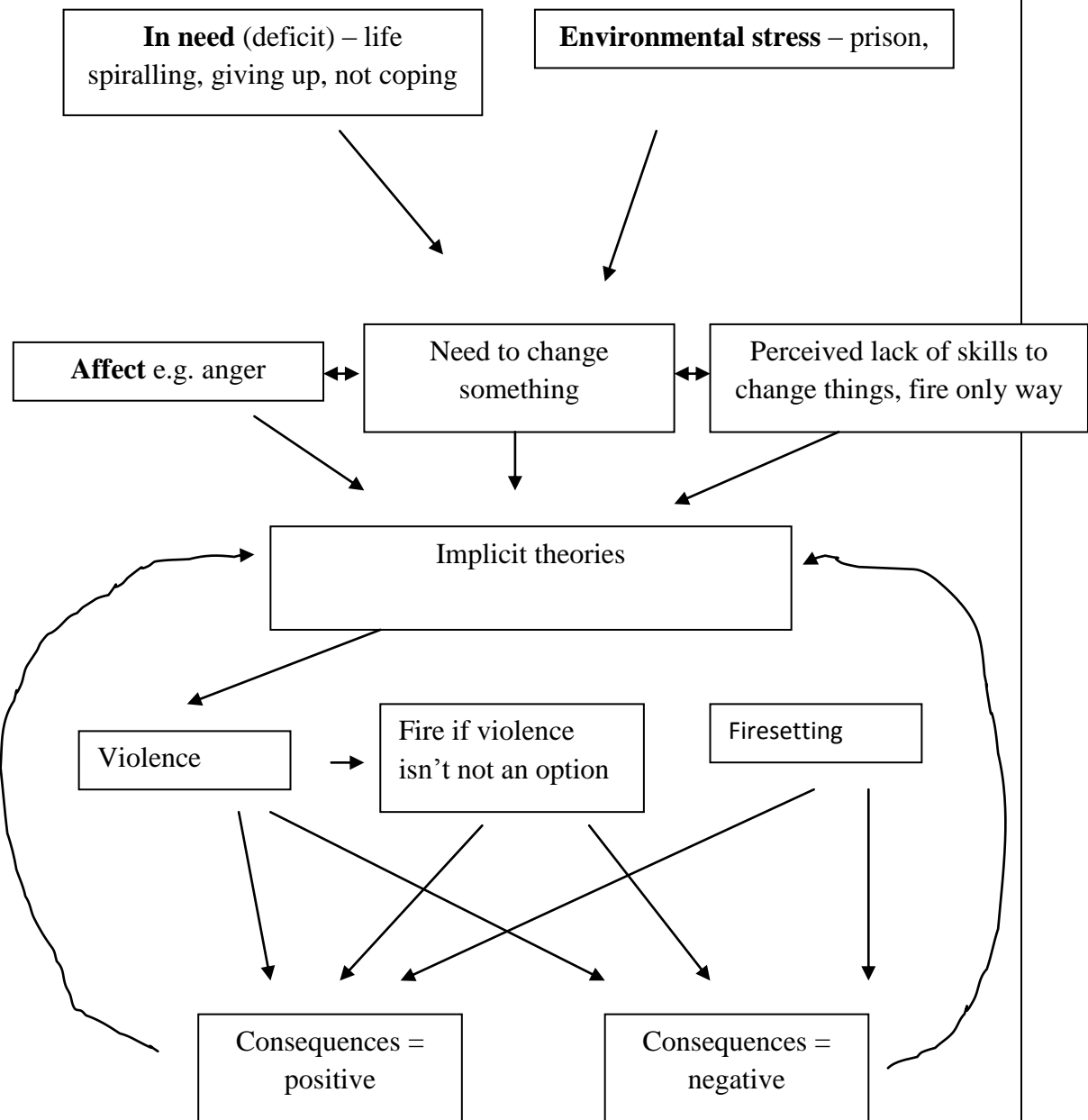
Displaced aggression hypothesis

This appears to fit somewhere. For example, some participants (A & I) talked about setting fire as they were on their own so couldn't be aggressive.

7th June 2012

The model

Would this model work?



Being in need and environmental situations impact on an individual's affect, desire to change something and perceived lack of skills to change anything. They rely on their implicit theories which leads them to either 1) be violent, 2) set a fire when violence is not possible, and 3) set a fire. There are positive and negative consequences to

firesetting, some of which may reinforce and strengthen the implicit theories.

Memo: 8th June 2012

The world is dangerous (category)

The belief within this implicit theory is that the world is (1) physically a dangerous place. The participants had often experienced physical abuse as children and as adults lived in environments where there was actual physical danger, therefore reinforcing this theory about the world. In this world they expect violence and see themselves as having to ‘survive’. Survival is sometimes in the form of allies in prison for example. Firesetting happens in the dangerous environment. Prison is viewed as more dangerous than hospital and firesetting occurred more often in prison. Many of these participants lived a general criminogenic lifestyle (gangsters) which was dangerous. Protecting self from potential harm was important as was learning to protect yourself and not making the same mistake again.

Hierarchy was important to many of these participants, particularly those who had spent time in prison. It was important that they were ‘in charge’, therefore making a dangerous world a safer world to live in. If there were not in charge, it was important that they knew who was and who to give the respect to.

Participants had many experiences of being powerless of the world (e.g. in prison) and firesetting may have been a way of showing power when what they could use was limited. This feeling of powerlessness is likely to invoke anger is someone for whom hierarchy is an important aspect of life.

Another core belief associated with this theory is that the world is inherently uncaring and hostile. People are malevolent and will cause harm. Core to this is that people cannot be trusted. They either take something away and intentionally cause harm, e.g. ‘stitch you up’ (D) or they don’t give what is needed (B). The participants talked about experiencing a lot of shame at the hands of others.

They talked about being different to others in society, with prison life being normal, and within prison, often being on the hospital wing. This difference creates a need for self protection.

The participants talked about struggling to cope in an unpredictable the world and usually using drugs and alcohol to do so. Opportunities to express oneself were limited maybe leading to frustration too.

Memo: 8th June 2012

Violence is normal (category)

The core assumption in this implicit theory is that violence is a useful and normal way to deal with situations (J even thought of it as a habit). Participants talked about experiencing violence (in prison and out [E]). The talk was as though it was normal and not a strange or traumatising thing to do. (I) talked about being unaffected by violence, was it that much of a way of life that he no longer noticed it around him.

Violence is used to get needs met and to show power. People talked about ‘acting rebelliously’ (A & I) as if it’s just something you do, that everyone does.

Participants talked about deserving violence (A) if for example they had do something wrong, this was an acceptable way to be punished and is justified. Violence was not ok towards them if they had done nothing wrong and did not deserve to be punished (A). Violence was used to show power and authority (J) and one participant (J) talked about making himself stronger so he could be even more violent.

There was talk of overpowering violence, violence they just could not compete with from prison officers (as they were wearing protective equipment). Violence was a way of gaining and maintaining respect. The violence between inmates had to be ‘fair’ to be respectful (D talked about having broken ribs).

There is the idea that one should defend themselves and shouldn’t let others walk all over them. Some participants thought about violence being the only way to deal with a situation/show power.

I talked about firesetting being ‘normal’ and everyone setting fire in prison.

[A] talked about using fire to express and release anger and that this is acceptable. He, also thought that violence was preferable, however if violence was not an option (I thought this too) then firesetting was an option. This was often the case if they were angry and in a normal situation would be violent but were locked in a cell alone and therefore couldn’t be violent. This fits the displaced aggression hypothesis.

Firesetting was often minimised. Is this because compared to the violence these people had perpetrated and experienced it was less significant. Is it because they didn’t view it as serious or because all violence is normal and acceptable so firesetting is not different. It was important to participants that nothing of value was set fire to and often the number of fires set was underestimated as throughout the interview ‘oh yeah, there was that other fire!’.

8th June 2012

The model

It seems that the implicit theories I am generating would fit best within the social cognitive model. This model has hypothesised that cognitions are the process between stimulus and response and appears to be similar to the model I have come up with, but perhaps a more refined version?

Memo: 27th June 2012

Violence is expected subcategory

I am thinking that the subcategory ‘violence is expected’ which is part of the category ‘dangerous world’ bears to many similarities to ‘violence as a way of life’ which is part of the category ‘violence is normal’. I have been trying to refine these subcategories but the overlap is enormous and it is impossible to refine them as

distinct subcategories. Based on this, I will merge these two subcategories into 'violence is a way of life' within the violence is normal category. This enables to 'dangerous world' category to reflect people and their perceived malevolence and not violence.

Does this mean that the 'Dangerous world' subcategory should be renamed 'malevolent world' to reflect its new conceptualisation?

Appendix 13: Inter-rater reliability procedure

Main category inter-rater reliability

Below is a description of the main categories generated as part of the present study. Please put a tick under the category heading where you would categorise each quote. A brief description of the categories is provided below:

Dangerous world: The world is considered a hostile and uncaring place; people are malevolent, will cause harm and are not to be trusted. Others will do harm by not acting (e.g. not caring or not meeting the individual's needs) or acting malevolently (e.g. lying, stitching you up). This category reflects a perceived inability to cope in the world.

Violence is normal: Violence is considered a useful, acceptable and normal way to deal with situations and not considered traumatising for either the victim or the perpetrator. Firesetting is just one of a myriad of ways to commit violence. Experiences not intended as violence (e.g. restraint, forced medication) are experienced as violent. Power and authority and being alert for violence were important. Firesetting was minimised and considered a common activity. Violence was particularly acceptable for expressing anger and if violence was not an option firesetting was used.

Uncontrollable world: Beliefs are held that the individual has little ability to impact on their social world. Participants believed that they didn't have the necessary skills to deal with a situation and that firesetting would be more effective. The consequences of firesetting were not thought about at the time and were often accepted as if the individual was passively being controlled by the world. The indeterminate amount of time spent in hospital and institutions making decisions on behalf of the individual adds to the perceived uncontrollability of the world.

Accountability: The firesetting was considered to have occurred as a result of an external event or person, without which, the firesetting would not have occurred. Accountability should therefore not be placed with the participant. Many participants did not consider themselves 'arsonists' or 'firesetters'.

Fire is controllable: Fire can be controlled either by the individual, by fire controlling itself or by someone else noticing the fire and controlling it. The individual often considered themselves safe with fire. It is thought that the goals of the firesetting will be achieved without any additional harm or destruction being caused. The reaction of others to the firesetting was considered surprising and out of proportion. Setting fire was considered unlikely to harm anyone, and any harm caused would be the fault of the victim.

Fire is a powerful tool: The power and danger of fire is well known and consequently used to effect a change on a situation. For some, firesetting improved their situation, for some it made it worse.

	Dangerous world	Violence is normal	Uncontrollable World	Accountability	Fire is controllable	Fire is a powerful tool
1. "The new social worker he he was sort of like not very helpful, he sort of ganged up on me with another member of staff and I didn't like him, he wasn't, he didn't seem to care very much about me".						
2. "I think I must've been trying to scare the police".						
3. "So, I don't know what went wrong down there but I ended up in the strip cell in a body belt and all sorts of shit and erm living like a dog I was (laughing), they used to come in and put my meal down, they used to put a pint pot of water down, I could get about half inch out of it and then it would go all over the place, you know what I mean?".						
4. "Physically depend myself and [prison] is A and B cat and allocation prison and it is quite a dangerous prison, there's always three fights and a stabbing every day..."						
5. "Quite a few people do it; quite a few people do set their cells on fire".						
6. "I suppose I've always thought the fires were not that bad, I've got quite familiar with fire. It's something that I've used, I cook by, I've had fires as lot when I've been out sleeping rough and all that. So it's something that's quite familiar to me".						

<p>7. “I didn’t think at all about my neighbours or anything”</p>						
<p>8. Interviewer: “So you had to go to the absolute extreme and set fire”?</p> <p>Ben: “... they wasn’t listening to what I had to say, they weren’t taking much interest”.</p>						
<p>9. “No, it won’t spread because they’re self contained and built in such a way, anti-fire stuff, that’s all I can say”.</p>						
<p>10. Interviewer: “Do you think things might have been different if somebody had noticed things like that?”.</p> <p>Cameron: “Course they would”.</p>						
<p>11. “If the neighbours had been better, been a bit more friendly towards us and then perhaps that wouldn’t have happened sort of thing”.</p>						
<p>12. “...I’m not really a person whose done arson or you know set things alight”</p>						
<p>13. “The people who’ve said they want to go in the hospital system have actually stayed in longer than they would have done if they’d have stayed in the</p>						

<p>prison”</p>						
<p>14. “They come in and beat the granny out of me. They injected me up the arse, up each cheek, anyway, that went on, they did me 5 times in 28 days, erm....for nothing. I was talking out the window to a few of my pals and they done me, you know what I mean”</p>						
<p>15. Interviewer: “You sound quite surprised that you got in trouble for it?”</p> <p>Participant G: “Yeah, yeah. It’s something I wouldn’t normally do”</p>						
<p>16. “It was just a threat, that’s all, just a threat to try and get him to put the petrol in”.</p>						
<p>17. “ just, cry for help I suppose”</p>						
<p>18. “They tried to stitch me up for a burglary that I didn’t commit and they obviously thought we can’t get him for burglary we’ll pin an arson charge on him”</p>						

Subcategory inter-rater reliability

Below, under each main category is a description of two of the subcategories that comprise that main category. Next to each quote, please circle the subcategory under which you would categorise it.

Dangerous world Category

People cannot be trusted subcategory:

Encapsulated beliefs that the world is inherently uncaring and hostile; people are malevolent, will cause harm and are not to be trusted. Experiences with others had left participants with feelings of shame, humiliation, and violation. Other people were viewed as intentionally harmful, based on experiences of others not acting (e.g. not caring or not meeting the individual’s needs) or acting malevolently (e.g. lying, stitching you up).

Struggling to cope in the world subcategory:

Reflected a perceived inability to cope with day to day life and unpredictable experiences such as adapting to life in prison and homelessness. Attempts to cope were often maladaptive, such as through the use of substances.

Quote	Dangerous world	
“they lied in court and that’s when I got done, because of their lies”	People cannot be trusted	Struggling to cope in the world
“drinking alcohol to obliterate my psychological problems”	People cannot be trusted	Struggling to cope in the world
“just like driving myself up the wall really, you know. It’s hard doing it, at first it’s hard doing it, then you get used to it”	People cannot be trusted	Struggling to cope in the world

Violence is normal Category

Violence as a way of life subcategory:

This subcategory represented the assumption that that violence was expected and often inevitable and was more likely to be subscribed to by participants who had spent a considerable amount of time in prison. Violence was an acceptable part of daily life; both perpetrating it and being victimised by it. Consequently, power and authority, being constantly alert for violence and learning to protect yourself were important. Violence was also normalised by participants and described as an appropriate way to give and receive deserved punishment.

Minimising firesetting subcategory:

The commonality of firesetting, not setting fire to anything of value, how nobody was harmed by their firesetting were represented within this subcategory along with an underestimation of

the number of fires that had been set, leading to beliefs about fire being a normal way to perpetrate violence

Quote	Violence is normal	
“we did a lot of fighting, and then the other place [hospital], there was fighting going on every day, it wasn’t like this place, the alarms were going off every every two or three hours with people fighting, it didn’t bother me”	Violence as a way of life	Minimising firesetting
“he’s been away about 20, must be about 30 years now and all he did was set fire to erm some bales of hay”	Violence as a way of life	Minimising firesetting
“ I used to put, you know boiling water, I used to put my hand under to make it stronger so I could hit the screws harder”	Violence as a way of life	Minimising firesetting

Uncontrollable world Category

Having limited self-efficacy subcategory:

Encapsulated experiences of uncontrollable events occurring (e.g. loss of care, a relationship breakdown or someone close dying), leading to a wider belief about the world being uncontrollable. Some participants considered themselves not to have the necessary skills to deal with a situation and that firesetting would be more influential.

Being in the hands of institutions subcategory:

Reflected experiences of institutions making decisions on behalf of participants.

Quote	Uncontrollable world	
“my solicitor said I was untreatable because I was a psychopath and like so they had no reason to hold me here, well, they couldn’t ever hold me here, and now it’s all changed, because now I’ve got to do all this work”	Having limited self-efficacy	Being in the hands of institutions
Interviewer: “So you had to go to the absolute extreme and set fire”? Ben: “... they wasn’t listening to what I had to say, they weren’t taking much interest”.	Having limited self-efficacy	Being in the hands of institutions
“The people who’ve said they want to go in the hospital system have actually stayed in longer than they would have done if they’d have stayed in the prison system, because in the prison system at the end of the day you’ve got something at the end of, at the end of the tunnel so to speak, you’ve got a date, you know what I mean”.	Having limited self-efficacy	Being in the hands of institutions

Accountability Category

External event responsible for firesetting

Represented beliefs that had a particular event (e.g. council forcing removal of a car, being put in segregation) not occurred the firesetting would not have occurred. It also encapsulated a narrative about mental health difficulties being responsible for firesetting and beliefs that others should have noticed they were unwell

Experiencing deficit that others should have filled

Encapsulated beliefs that experiences such as being in need, alone, poor, unable to look after themselves, having no material possessions, feeling frightened and not knowing where to turn to for help led to a deficit which participants considered should have been and were not filled by others. The accountability for firesetting should therefore be placed with others.

Quote	Accountability	
“If the neighbours had been better, been a bit more friendly towards us and then perhaps that wouldn’t have happened sort of thing.”	External event responsible for firesetting	Experiencing deficit that others should have filled
“Yeah, I kept moving it, they wanted it moved. They wanted it moved and I couldn’t move it, that’s right, because the brakes were locked on. The brakes were locked on so the Council wouldn’t move it, they said I had to move it and I got home and I burned it out basically to get them to move it”.	External event responsible for firesetting	Experiencing deficit that others should have filled
“, I didn’t have a psychiatric team, no release money, no... nowhere to live or anything”	External event responsible for firesetting	Experiencing deficit that others should have filled

Fire is controllable Category

Fire can easily be controlled subcategory:

Encapsulated beliefs that fire can be controlled either by the individual themselves, another individual noticing and controlling it or that fire can control itself; the unpredictability and dangerousness of fire was commonly underestimated

Fire is a safe commodity subcategory:

Prior familiarity with fire automatically lead participants to believe they were safe with fire.

Quote	Fire is controllable	
“I worked on a tanker up the Persian Gulf and you had to be fire safety and fire conscious”	Fire can easily be controlled	Fire is a safe commodity
“I suppose I’ve always thought the fires were not that bad, I’ve got quite familiar with fire. It’s something that	Fire can easily be controlled	Fire is a safe commodity

I've used, I cook by, I've had fires as lot when I've been out sleeping rough and all that. So it's something that's quite familiar to me"		
"No, it won't spread because they're self-contained and build in such a way, anti-fire stuff, that's all I can say"	Fire can easily be controlled	Fire is a safe commodity

Fire is a powerful tool Category

Knowing the power and danger of fire subcategory:

Reflected knowledge about the danger of fire and inferring its power if used.

Using fire to impact on a situation subcategory:

Reflected the notion that fire, being so powerful and dangerous could be used to impact on a situation and encapsulated the wide range of situations the 'tool' of fire could impact upon (e.g. a cry for help, to get revenge).

Quote	Fire is a powerful tool	
"So yeah, it's life threatening, isn't it?"	Knowing the power and danger of fire	Using fire to impact on a situation
"It was just a threat, that's all, just a threat to try and get him to put the petrol in"	Knowing the power and danger of fire	Using fire to impact on a situation
". It was a cry for help in the wilderness, I was lost"	Knowing the power and danger of fire	Using fire to impact on a situation

Appendix 14: Category development process

Open coding: 319 codes were generated at the initial coding stage

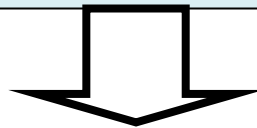
- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Serious personal consequences of firesetting 2. Not taking responsibility for firesetting 3. Minimising firesetting 4. Doing more time in hospital than prison 5. Uncertainty in hospital 6. Staff assuming illness 7. Being powerless 8. Staff blowing things out of proportion 9. Experiencing power difference 10. Staff assuming illness 11. Staff blowing things out of proportion 12. Firesetting getting blown out of proportion 13. Taking life as it comes 14. Not caring about consequences of actions 15. Thinking about consequences not usual 16. Staying alive 17. Protecting self at any cost 18. Self-protection 19. Immediate danger 20. Fighting to stay alive 21. Fighting being the only option 22. Long term consequences of firesetting 23. Deteriorating mental health 24. Experiencing violence 25. Wanting to die 26. Different to others who are mentally unwell 27. Normalising mental distress 28. Surviving in prison | <ol style="list-style-type: none"> 29. Needing other people to survive in prison 30. Unable to express self 31. Being demeaned 32. Assuming gangsters are ‘normal run of the mill people’ 33. Uncontrollable 34. Dangerous person 35. Impulsive action 36. Acting rebelliously 37. Being violent 38. Assuming violence will be perpetrated 39. Redressing the power imbalance 40. Being medicated against will 41. Being violated 42. Doctors breaking the rules 43. Pushing limits 44. Not thinking about consequences of actions 45. Being humiliated 46. Being aggressive 47. Being moved 48. Being ignored 49. Being helped 50. Learning to protect self 51. Being punished 52. Being suicidal 53. Trying to gain respect 54. Not making own decisions 55. Prison life is normal 56. Prison as consequence for firesetting 57. Deserving violence 58. Sometimes violence is justified 59. Violence as a way to deal with situations 60. Fire being a small part of a big story |
|--|--|

61. Fire insignificant
62. Being lied about
63. Different rules in prison
64. Violence in response to violence
65. Violence being acceptable
66. Firesetting making the situation worse
67. Gaining no pleasure from firesetting
68. Using fire to express anger
69. Using fire to release anger
70. Fire being the only way of expressing self to others
71. Others over reacting to fire
72. Being in fights
73. Loosing fights with authority
74. Over-powering violence from others
75. Prison staff using violence unnecessarily
76. Violence requires practice
77. Unfair fights
78. Being controlled by others
79. Being in control of self now
80. Pushing boundaries
81. Not being listened to
82. Staff breaking rules
83. Trying to kill self
84. Other people not caring
85. Being unable to trust what other people say
86. Nearly dying and being cared for at hands of the same people
87. Having to deal with consequences
88. Deserved consequences
89. Crimes blown out of proportion
90. Fire is fascinating and intriguing
91. Fire is powerful
92. Having knowledge about fire
93. Fire is dangerous
94. Not being responsible for firesetting
95. Not thinking about consequences of firesetting
96. Feeling confused
97. Being alone
98. Some friendly and encouraging healthcare professionals
99. People not visiting
100. Being unable to look after self
101. Loosing mum; the one who cared
102. Mum keeping in contact
103. Getting noticed
104. Other people not looking after him
105. Nobody interested
106. Fending for self
107. Being unable to cope
108. Setting fire to get noticed
109. Using fire to ask for help
110. Feeling desperate
111. Having to set fire to get help
112. Positive consequences to firesetting
113. Needing to be looked after by others
114. Everyone giving up
115. Nothing to lose
116. Wanting to be cared for
117. Lost care previously had
118. Using drugs to cope
119. Setting fire as a last resort
120. Being abandoned
121. Trying to survive
122. Knowing fire not the right way to get help
123. Getting help needed after setting fire
124. Thinking other people should have done something differently
125. Unfriendly world
126. Fire is frightening
127. Using fire to conceal crime
128. Fire getting out of control
129. Being unable to remember fire; ill
130. Following instructions of voices
131. Using fire to avoid punishment
132. Being out control when setting the fire
133. People not noticing needs
134. Being unwell
135. Not knowing who to turn to
136. Feeling angry with people
137. Feeling different to everybody else
138. World being a scary place
139. Not having needs met

- 140. Fire would not have happened if someone noticed things weren't right
- 141. Confusion between thoughts and voices
- 142. Not intending to hurt others with fire
- 143. Using fire to solve a problem
- 144. Keeping fire safe
- 145. Police viewing firesetting as more serious
- 146. Being 'stitched up'
- 147. Police going to any length to cause harm
- 148. Being intoxicated
- 149. Entitled to what is his
- 150. Having nothing (e.g. clothes, money)
- 151. Unpredictable world
- 152. Taking control of the situation
- 153. Using fire to remove something distressing
- 154. Feeling as though others are mocking
- 155. Fire shows power
- 156. Being lied about
- 157. Living a criminal lifestyle
- 158. Hierarchy
- 159. Showing power
- 160. Being in charge
- 161. Using violence to meet needs
- 162. Violence is the only way to defend self
- 163. Being mocked
- 164. Protecting self from potential harm
- 165. Violence being expected
- 166. Living in a violent environment
- 167. Feeling scared in prison
- 168. Keeping safe in prison
- 169. Using violence to show power
- 170. 'Fair' violence to gain respect
- 171. Being in need
- 172. People will cause harm if they can
- 173. Using fire to express feelings
- 174. Protecting self and property from fire
- 175. Feeling harassed by the police
- 176. Being wrongly accused
- 177. Hospital is safer than prison
- 178. Violence is inevitable
- 179. Using fire for revenge
- 180. Using fire to send a message
- 181. Being wrongly incriminated
- 182. Using drugs
- 183. Hating the police
- 184. Feeling persecuted
- 185. Negative impact of medication on firesetting
- 186. Negative impact of hospital on firesetting
- 187. Using alcohol to cope with situation
- 188. Controllability of fire
- 189. Anonymity of firesetting
- 190. Doing well in life, temporarily
- 191. Fire is safe
- 192. Fire setting is normal
- 193. Not wanting to be part of the fire
- 194. Knowing fire setting will be viewed as wrong
- 195. Fire can control itself
- 196. Gaining desired consequences from firesetting
- 197. If someone hurt by fire it's their fault
- 198. Setting fire to nothing of value
- 199. Being unsafe
- 200. Being in danger
- 201. Feeling frightened
- 202. Feeling justified in setting the fire
- 203. Fire as protection
- 204. Struggling to cope with life
- 205. Being homeless
- 206. Friends not helping
- 207. Life going up and down
- 208. Fire is an effective tool to use
- 209. Multiple uses for fire
- 210. Being familiar with fire
- 211. Underestimating number of fires set
- 212. People trying to cause harm
- 213. Using fire to get what you want
- 214. Knowing the power for fire
- 215. Fire controls itself
- 216. Underestimating the danger of fire
- 217. Feeling angry

218. Not being a violent person
219. Hospital cases people to make the same mistakes over again
220. Using drugs is normal and not harmful
221. Having difficulties forming relationships
222. Being isolated
223. Thinking I am safe with fire
224. Thinking fire is dangerous 'in the wrong hands'
225. Bipolar impacting on firesetting
226. 'Acting out of character' at the time of firesetting
227. Firesetting resulted in much personal loss
228. Accepting the consequences of firesetting
229. Being unable to explain some of own actions
230. Assuming people are malicious
231. Being 'out of order' with the firesetting
232. Nobody harmed
233. Threatening to hurt self with fire
234. Threats of fire causing concern to the police
235. Having knowledge about fire and combustibles
236. Being a different person now
237. Illness causing firesetting
238. Using fire to influence a situation
239. Using fire to scare the police
240. Setting fire as a warning
241. Not intending to harm people with fire
242. Knowing now that firesetting was wrong
243. Loss of a loved one
244. Losing a property
245. Friendship ending
246. Not being interested in fire
247. Being grateful for help received
248. Assuming police weren't going to be helpful
249. Being in a relationship with a negative influence
250. Fire can be 'lethal'
251. Not thinking of oneself as an arsonist
252. Always knowing what is dangerous
253. Being able to control 'out of hand' fire
254. Avoiding using the word 'arson'
255. Having a hard time in prison
256. Finding prison life difficult
257. Live for the day
258. Prison life can be dangerous
259. People are not to be trusted
260. Using fire as a means to an end
261. Struggling to adapt to prison life
262. Having difficulty sleeping
263. Thinking setting fire is not dangerous
264. Not intending to 'cause havoc'
265. Having no control over life
266. Ability to influence own life is restricted
267. Not viewing self as a firesetter
268. Reaction of others to firesetting is surprising
269. Not usually violent
270. Not viewing self as an arsonist
271. Having limited options to solve problem
272. Being a recluse
273. Having 'bad reports written' by prison service
274. Waiting to go to court
275. Not wanting to be in prison
276. Having an interest in fire is 'strange'
277. Not liking arsonists
278. Arsonists harm others
279. Not agreeing with arson
280. Rebelling from everything
281. Being portrayed as a bad person
282. People having a negative opinion about oneself is normal
283. Not worrying about things that cannot be changed
284. Being excluded from mainstream life due to mental illness
285. Getting upset about something hen setting a fire

- | | |
|--|--|
| <p>286. Not caring about consequences of firesetting</p> <p>287. Doing many things ‘spur of the moment’</p> <p>288. Violence being a way of life</p> <p>289. Being unaffected by violence</p> <p>290. Being adaptable to situations</p> <p>291. Attempting to keep self safe during firesetting</p> <p>292. No knowing why set fire</p> <p>293. Assuming the fire was controllable</p> <p>294. Being invincible</p> <p>295. Knowing fire would be controlled</p> <p>296. Firesetting common in prison</p> <p>297. Firesetting happens in prison but not hospital</p> <p>298. Unable to explain why set fire</p> <p>299. Just live with consequences of unthinking actions</p> <p>300. Untreatable person</p> <p>301. Being understood</p> <p>302. Fire is upsetting</p> | <p>303. Thinking others underestimate how dangerous fire is</p> <p>304. People being inconsistent</p> <p>305. Being incriminated by others</p> <p>306. People who are meant to care causing harm</p> <p>307. Experiencing a significant loss</p> <p>308. Fighting (internal) to survive</p> <p>309. Being bullied</p> <p>310. Making self stronger so can fight harder</p> <p>311. Fighting the toughest people</p> <p>312. Spending a lot of life in prison</p> <p>313. Being unable to trust other people as they are dishonest</p> <p>314. Thinking other people try to get oneself into trouble</p> <p>315. Care being received was damaging</p> <p>316. People who help make things worse</p> <p>317. Violence becoming a habit</p> <p>318. Giving up on life</p> <p>319. Should defend self</p> |
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Focused coding: Focused coding of further interview data, the initial codes were amalgamated into the following 47 focused codes.

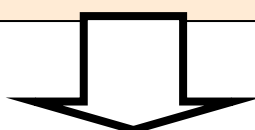
- | | |
|--|--|
| <p>1. Minimising firesetting</p> <p>2. Being powerless</p> <p>3. Consequences of firesetting</p> <p>4. Things being blown out of proportion by others</p> <p>5. Not caring about consequences of actions</p> <p>6. Not thinking about consequences of actions</p> <p>7. Living in a dangerous and violent world</p> <p>8. Coping</p> <p>9. Life being unpredictable</p> <p>10. Deteriorating mental health</p> <p>11. Violence as a way of life</p> | <p>12. Giving up on life</p> <p>13. Being different</p> <p>14. Unable to express self</p> <p>15. Impulsive</p> <p>16. Fire a small part of a big story</p> <p>17. Using fire as an expression of anger</p> <p>18. Gaining desired consequences from firesetting</p> <p>19. Being unable to trust people</p> <p>20. Experiencing loss</p> <p>21. Knowing someone would control the fire</p> <p>22. Assuming fire can control itself</p> <p>23. Being in control of the fire</p> <p>24. Using fire to solve a problem</p> |
|--|--|

- | | |
|--------------------------------------|--|
| 25. Using fire to send a message | 37. Nature of harm |
| 26. Using fire to get what is wanted | 38. Using fire to avoid punishment |
| 27. Using fire as revenge | 39. Being in need |
| 28. Experiencing shame | 40. Using fire to get help |
| 29. Fire being the <u>only</u> way | 41. Distancing self from arson/arsonists |
| 30. Responsibility for fire | 42. Fire as a protection for self |
| 31. Feeling alone | 43. Impact of institutions |
| 32. Having limited control over life | 44. Power and authority |
| 33. Interest in fire | 45. Changing as a person |
| 34. Expressing familiarity with fire | 46. Remaining anonymous |
| 35. Fire is powerful and dangerous | 47. Not knowing why firesetting occurred |
| 36. Thinking fire is safe | |



Subcategories: Further focused and theoretical coding synthesised and condensed the data enabling the generation of the following 17 subcategories.

- | | |
|---|---|
| (A) People cannot be trusted | (J) Experiencing deficit that others should have filled |
| (B) Struggling to cope in the world | (K) Being given no other option |
| (C) Violence as a way of life | (L) Fire can easily be controlled |
| (D) Minimising firesetting | (M) Fire is a safe commodity |
| (E) Firesetting as an acceptable way to express anger | (N) Fire setting being 'blown out of proportion' |
| (F) Having limited self efficacy | (O) Not causing harm to people with fire |
| (G) Living with the consequences | (P) Knowing the power and danger of fire |
| (H) Being in the hands of institutions | (Q) Using fire to impact on a situation |
| (I) External event responsible for firesetting | |



Categories: The generated subcategories were refined and condensed into six main categories.

- | | |
|-------------------------|----------------------------|
| 1. Malevolent world | 5. Fire is controllable |
| 2. Violence is normal | 6. Fire is a powerful tool |
| 3. Uncontrollable world | |
| 4. Accountability | |

Appendix 15: Category structure

Example quotations	Example open codes	Example focused codes	Subcategory	Main category
<p>‘they was trying to stitch me up and so were the solicitors, judges and things’</p> <p>‘He’s put his finger up my arse and he’s pulled it out and her erm, there was erm sort of like a bit of shit on there and went ‘cor, I’ve got to eat my dinner off that’. I went fucking mad’</p>	<p>Being ‘stitched up’</p> <p>People are not to be trusted</p> <p>Being violated</p> <p>Being humiliated</p>	<p>Being unable to trust people</p> <p>Experiencing shame</p>	<p>(A) People cannot be trusted</p>	<p>Dangerous world</p>
<p>‘alcohol to obliterate my psychological problems’</p> <p>‘Furniture was getting better, my cars were getting better and things</p>	<p>Using alcohol to cope with situation</p> <p>Struggling to cope with life</p> <p>Doing well in life, temporarily</p>	<p>Coping</p> <p>Life being unpredictable</p>	<p>(B) Struggling to cope in the world</p>	

<p>were coming better after being in hospital, being in such a mess on medication’ Anyway, erm, this went on, then I got transferred to erm erm...No I went back on the ward</p>	<p>Life going up and down</p>			
<p>‘... they come in and beat the granny out of me. They injected me up the arse, up each cheek, anyway, that went on, they did me 5 times in 28 days, erm....for nothing...’ ‘I just say to myself, alright, you deserved it, end of story, let’s move on’. ‘I sort of was quite up... quite up on the sort of prison hierarchy scale’ ‘I quite enjoyed myself, not setting light to the</p>	<p>Experiencing violence Deserving violence Hierarchy Being in charge</p>	<p>Violence as a way of life Power an authority</p>	<p>(C) Violence as a way of life</p>	<p>Violence is normal</p>

<p>teddy bears, it was just a... it was a weird experience. And I was the one that come out on top so... even though I got put away for three years²</p>	<p>Fire shows power</p>			
<p>‘I mean a far as that silly; I think it’s a silly event’ ‘thinking about it in hindsight, alright it was an old shirt’ ‘they’re the three fires I’ve setThere was one more fire, a recent one, but that was just an accident’</p>	<p>Minimising firesetting Setting fire to nothing of value Underestimating number of fires set</p>	<p>Minimising firesetting</p>	<p>(D) Minimising firesetting</p>	
<p>‘I think it was just a rebellious erm action, you know what I mean. Fuck your prison and you know’ ‘Well there was no one there but me, you know what I mean, I’m on my own in the cell²</p>	<p>Using fire as an expression of anger Using fire to release anger</p>	<p>Using fire as an expression of anger</p>	<p>(E) Firesetting as an acceptable way to express anger</p>	
<p>My lighter’s in there, I can’t bring it through the ward, well I can bring it through the ward if I wanted to, know what I</p>			<p>(F) Having limited self efficacy</p>	<p>Uncontrollable world</p>

<p>mean. Same as my phone's in there, know what I mean. Or I could go up one of the shops or down the town and get erm a sneaky one,</p> <p>'sometimes if they haven't got staff they won't let you out because once they let you out staff have got to be monitoring what's going on and you know going into people's cells'</p> <p>'... they wasn't listening to what I had to say, they weren't taking much interest'.</p> <p>'I was in prison when she died'</p> <p>'I had a girlfriend in the</p>	<p>Being controlled by others</p> <p>Ability to control own life is restricted</p> <p>Having limited options to solve a problem</p> <p>Not making own decisions</p> <p>Loss of mum, the one who cared</p> <p>Loss of a loved one</p>	<p>Having limited control over life</p> <p>Experiencing loss</p>		
--	--	--	--	--

<p>flats and she died’ ‘losing that property in [REDACTED], that’s when I first became unwell a bit’</p>	<p>Loss of property</p>			
<p>‘Yeah, I mean, basically I never used to think about anything, know what I mean, I used to like take life as it comes, do things on the spur of the moment and if the consequences erm were averse then you know I just had to lump it’ ‘I think it’s still mentioned in my reports’ ‘It’s actually quite shameful what I done. My daughters are upset and the family I’ve upset and my business and my home’</p>	<p>Not thinking about consequences of actions Live for the day Long term consequences of firesetting Serious personal consequences of firesetting Having to deal with the consequences</p>	<p>Not thinking about consequence of actions Consequences of firesetting</p>	<p>(G) Living with the consequences</p>	
<p>‘Healthcare workers, she goes... ‘they just kept giving you drugs and drugs and drugs and drugs</p>	<p>Care being received was</p>		<p>(H) Being in the hands of institutions</p>	

<p>and then you just went fucking flat. They they took you down the the [hospital] to have ECT treatment and erm on the 3rd occasion the anaesthetist refused to do anymore because she thought you were having a fucking stroke'...'</p> <p>'my solicitor said I was untreatable because I was a psychopath and like so they had no reason to hold me here, well, they couldn't ever hold me here, and now it's all changed'</p>	<p>damaging</p> <p>Untreatable person</p>	<p>Impact of institutions</p>		
<p>'I needed to get rid of the car, it was getting tickets on it by the police or by the Council'</p> <p>'I don't really start fires'</p>	<p>Not being responsible for firesetting</p> <p>Not viewing self as a firesetter</p>	<p>Responsibility for firesetting</p> <p>Distancing self from arsonist/arsonists</p>	<p>(I) External event responsible for firesetting</p>	<p>Accountability</p>

<p>‘some arsonists who put petrol in someone’s letterbox and I wouldn’t even dream of doing anything like that’</p>	<p>Arsonists harm others Not viewing self as an arsonist</p>			
<p>‘If the neighbours had been better, been a bit more friendly towards us and then perhaps that wouldn’t have happened sort of thing’ ‘I was feeling terrible with the medication and I was like a recluse really’ ‘I didn’t know who to turn to’</p>	<p>Being unwell People not noticing needs Being a recluse Being alone Not knowing who to turn to</p>	<p>Being in need Feeling alone</p>	<p>(J) Experiencing deficit that others should have filled</p>	
<p>‘I don’t know, just desperate, just don’t know, just couldn’t cope --’.</p>	<p>Setting fire as a last resort</p>	<p>Fire being the only way</p>	<p>(K) Being given no other option</p>	
<p>‘No, it won’t spread because they’re self-contained and built in such a way, anti-fire stuff, that’s all I can say’. ‘you’ve got your sink and you’ve got your loo, so if</p>	<p>Fire can control itself</p>	<p>Assuming fire can control itself</p>	<p>(L) Fire can easily be controlled</p>	

<p>if if the fire went out of hand I would have just chucked it into the loo and onto the sink and just pour water over it and that's it'</p>	<p>Being in control of the fire</p>	<p>Being in control of fire</p>		
<p>'I suppose I've always thought the fires were not that bad, I've got quite familiar with fire. It's something that I've used, I cook by, I've had fires as lot when I've been out sleeping rough and all that. So it's something that's quite familiar to me'</p> <p>'Something ten, twenty foot away's not going to suddenly catch fire, is it? It's all going to stay in the contained area that you set fire to it.'</p>	<p>Being familiar with fire</p> <p>Underestimating the danger of fire</p>	<p>Expressing familiarity with fire</p> <p>Thinking fire is safe</p>	<p>(M) Fire is a safe commodity</p>	
<p>'... there was another fella here, he's still here now...he's been away about...30 years now and all he did was set fire to</p>	<p>Firesetting being blown out of proportion</p>	<p>Things being blown out of</p>	<p>(N) Firesetting being 'blown out of proportion'</p>	

<p>erm some bales of hay’ .</p> <p>‘You sound quite surprised that you got in trouble for it?’</p> <p>‘Yeah, yeah. It’s something I wouldn’t normally do,’</p>	<p>Reaction of others to firesetting is surprising</p> <p>Police viewing firesetting as more serious</p>	<p>proportion by others</p>		
<p>‘No, I didn’t think anyone could be hurt. I still don’t see how anyone could’ve been hurt unless they run into it’.</p> <p>‘I didn’t want to hurt ... I’ve never been a hurtful person, didn’t want to hurt anyone at all</p>	<p>Nobody harmed</p> <p>Not intending to harm people with fire</p>	<p>Nature of harm</p>	<p>(O) Not causing harm to people with fire</p>	
<p>‘it upsets me because it’s so dangerous and youngsters don’t realise how dangerous it is’</p> <p>‘fire is a dangerous commodity, in the wrong</p>	<p>Thinking others underestimate how dangerous fire it</p> <p>Fire can be ‘lethal’</p>	<p>Fire is powerful and dangerous</p>	<p>(P) Knowing the power and danger of fire</p>	<p>Fire is a powerful tool</p>

<p>hands it could be lethal’</p> <p>‘I walked a fair way away and watched it from a distance. I didn’t want to be part of it’</p> <p>‘So the police and nobody ever found out you set that fire?’</p> <p>‘No’</p>	<p>Knowing the power of fire</p> <p>Not wanting to be part of the fire</p> <p>Anonymity of firesetting</p>	<p>Remaining anonymous</p>		
<p>‘I couldn’t cope ... so I just set fire to the curtains. It was a cry for help in the wilderness’.</p> <p>‘It was just a threat, that’s all, just a threat to try and get him to put the petrol in’</p> <p>‘I think I must’ve been trying to scare the police’.</p>	<p>Using fire to ask for help Getting noticed</p> <p>Using fire to get what you want</p> <p>Using fire to influence a situation</p> <p>Using fire to send a message</p>	<p>Using fire to get help</p> <p>Using fire to get what is wanted</p> <p>Using fire to send a message</p>	<p>(Q) Using fire to impact on a situation</p>	

	Using fire as a warning			
	Using fire to scare police			

Appendix 16: Example transcript

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Appendix 17: Participant summary

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Appendix 18: Summary to R&D

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Appendix 19: Journal requirements

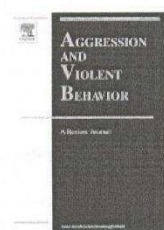


AGGRESSION AND VIOLENT BEHAVIOR

AUTHOR INFORMATION PACK

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Aggression and Violent Behavior, A Review Journal is a multidisciplinary journal that publishes substantive and integrative reviews, as well as summary reports of innovative ongoing clinical research programs on a wide range of topics germane to the field of aggression and violent behavior. Papers encompass a large variety of issues, populations, and domains, including homicide (serial, spree, and mass murder; sexual homicide), sexual deviance and assault (rape, serial rape, child molestation, paraphilias), child and youth violence (firesetting, gang violence, juvenile sexual offending), family violence (child physical and sexual abuse, child neglect, incest, spouse and elder abuse), genetic predispositions, and the physiological basis of aggression.

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