

# [To explain fire setting behaviour psychology essay](https://assignbuster.com/to-explain-fire-setting-behaviour-psychology-essay/)

Intentional firesetting is a costly and serious form of anti social behaviour that can have devastating consequences, both personally and financially. Encapsulating this notion, fire departments in the United States confirmed that in 2007, there were over 300, 000 intentionally set fires recorded, causing hundreds of fatalities, thousands of injuries and generated over a billion dollars of financial costs (Hall, 2010). The term firesetting is often used interchangeably with the legal term arson, defining the specific criminal act of intentionally or recklessly setting fire to damage or defraud (Vaughn et al, 2010). Conversely, firesetting is the term used to describe to incidences whereby the deliberate setting of fires may not have been prosecuted for a variety of reasons (e. g. insufficient severity to cause damage or has not been detected as a deliberate fire; identity of the firesetter is unknown; insufficient evidence to gain a conviction; or the young age of the setter; Dickens & Sugarman, 2012). Firesetting is therefore applicable to a wider scale of people who deliberately engage in setting fires, than the narrow definition of arson. Existing research suggests that such behaviour is more frequently perpetrated by child and juveniles than adults (Kolko, 1985). However recent findings show that approximately one million people in the United States, and 200, 000 in UK have set a fire since the age of 15 (Dickens & Sugarman, 2012), thereby suggesting firesetting often continues into adulthood (Blanco et al, 2010; Vaughn et al, 2010). Research into the potential origins of the behaviour indicates that such actions are strongly correlated with a range of individual characteristics and antecedents (Vaughn et al, 2010). What is more, firesetting is a symptom of pyromania, however as the community prevalence of this is apparently rare (Grant, Levine, Kim & Potenza, 2005; Lejoyeux, Arbarateaz, McLoughlin & Adés, 2002), the suggestion of co-morbidity between firesetting and more common types of mental disorder, as found by a range of scholars (Anwar, Långstrom, Grann & Fazel 2011; Blanco et al, 2010; Bradford & Dimock, 1986; Richie & Huff, 1999; Vaughn et al, 2010) has been preferred. As a result, these associations have largely featured in the construction of typologies, single factor and multifactor theories that attempt to explain firesetting behaviour. This essay aims to critically assess such theories.

A fundamental basis for effective assessment and treatment of criminal behaviour is awareness of, and comprehensive understanding of etiological theory. This provides a core framework from which to plot the interrelationships between an offenders presented clinical phenomena and central psychological variables. Within literature relating to sexual offending, Ward and Hudson (1998) eluded to a meaningful method of conceptualising etiological theory into two types; single factor and multi factor theories (Ward & Hudson, 1998). As these figure throughout the essay, it is favourable to address each style. Single factor theories are those which focus on explaining a lone factor and its causal relationship with offending. Conversely, multifactor theories unite various single factor theories into a thorough outline of offending, providing an account of how the factors are merged to facilitate offending behaviour (Gannon, Ó Ciardha, Doley & Alleyne, 2012).

A further, and relatively underdeveloped form of theory absent from those detailed by Ward and Hudson (1998) is taxonomic classification, or typologies. Here, various offenders are subtyped into groups, based on shared motivational factors, personality characteristics, demographic aspects or a combination of each (Gannon & Pina, 2010). These classifications represent unilateral assemblage that when deemed sufficient and reliable, play an effective role in assessment and treatment, as well as feeding into more comprehensive theories of offence behaviour (Gannon et al, 2012). Because of this reason, typologies will feature at the beginning of this evaluation. Before commencing however, it is beneficial to portray what constitutes the typical firesetter.

Firstly, reports from several scholars have suggested that the majority of apprehended firesetters are white (Bennett & Hess, 1984; Ritchie & Huff, 1999; Rix, 1994). Concerning gender, figures confirm that male firesetters are more frequent than female firesetters, for example one study highlighted that in excess of 80% of self reported firesetters were male, equal to a male: female gender ratio approximating 5: 1 (Blanco et al, 2010; Vaughn et al, 2010). In support, similar gender ratios that approach or exceeding this are common in various selected samples (Bourget & Bradford, 1989; Lewis & Yarnell, 1951; Stewart, 1993). Firesetting therefore, appears largely to be a male activity. In relation to age, studies have found that more than half of firesetters were aged 18-35 years, compared to 31% of the non-firesetter control population. In addition, older firesetters were found to be rare, with 4% aged 65 years and over, compared with 16% of population controls (Blanco et al; Vaughn et al, 2010). Other scholars have also reported a tendency towards youth as a risk factor (Bourget & Bradford, 1989; Puri, Baxter & Cordess, 1995). Therefore, firesetters appear to be generally young and moreover, a large number of studies further show that the majority of which are typically younger than non-firesetting criminals (Hurley & Monahan, 1969; Rice & Harris, 1991). Lastly, firesetters tend to be low achievers in education and more likely to be unemployed or unskilled than other non-firesetting offenders (Bradford, 1982; Harris & Rice, 1991), disadvantaged in terms of social class (Hurley & Monahan, 1969) and also possess difficulties in forming long lasting relationships, as many are typically reported to be living alone and never to have married (Bourget & Bradford, 1989; Puri et al, 1995; Ritchie & Huff, 1999; Dickens, Sugarman, Edgar, Hofberg, Tewari & Ahmad, 2009).

Representing the very earliest stages of theory development are typologies, of which there have been many (e. g. Icove & Estepp, 1987; Inciardi, 1970; Lewis & Yarnell, 1951; Rix, 1994). Perhaps the first researchers to provide a classificatory system for firesetters were Lewis and Yarnell (1951) who, using 2000 reports of firesetting identified four reasons as to why fires were set, these included: unintentionally, through delusions, through erotic pleasure and to acquire revenge (Lewis & Yarnell, 1951). This early typology was pioneering since it laid the foundations for other researchers to add to (Bradford, 1982). One scholar who obliged several years later was Inciardi (1970) who examined records of paroled firesetters released from state prisons over a six year period and observed six categories of firesetter: institutionalised, insurance claim, vandalism, crime concealment, excitement and revenge (Inciardi, 1970).

A key strength of Inciardi’s (1970) work was the amount of participants studied, but another was that there were similarities between two of the categorisations proposed by himself, and Lewis and Yarnell (1951). This is significant as the presence of these categories within firesetting can be linked to and supported by other empirical findings. For example, in reference to their erotic pleasure (Lewis & Yarnell, 1951) and excitement (Inciardi, 1970) categories, these hold particular relevance to symptoms of pyromania (American Psychiatric Association, 2000), an impulsive disorder characterised by intense fascination with and a desire to associate oneself with fire and fire paraphernalia, though as there are many diagnostic restrictions, the prevalence of pyromania is rare (Doley, 2003). An additional similarity seen between the two typologies (Lewis & Yarnell, 1951; Incairdi, 1970) is the inclusion of revenge as a category, which is supported as a motive for firesetting by many scholars (e. g. Koson & Dvoskin, 1982; Pettiway, 1987; Rix, 1994).

A key criticism of the typologies proposed by Inciardi (1970) and similar ones that followed (e. g, Dennet, 1980; Icove & Estepp, 1987; Rautaheimo, 1989) was that their categories were generally too broad (Gannon et al, 2012). Therefore, later typologies used a smaller number of categories using data driven strategies (e. g. Almond, Duggan, Shine & Canter, 2005; Canter & Fritzon, 1998; Harris & Rice, 1996; Rice & Harris, 1991), providing an empirically stronger classification of firesetters (Gannon et al, 2012). One such example by Rice and Harris (1996) investigated 11 variables thought to be closely associated with firesetting, in a sample of 243 mentally disordered firesetters. They discovered four categories labelled as: psychotics (motivated by delusions and characterised by few incidents), unassertives (motivated mainly by anger or vengeance and characterised by low assertiveness), multifiresetters (primarily set fires in institutions and characterised by poor developmental experiences), and criminals (likely to operate at night, characterised by poor developmental experiences and, personality disorder) (Rice & Harris, 1996).

Rice and Harris’s (1996) typology is possibly one of the strongest available as not only does it state the criteria required for group membership, but many of their aspects above are supported by empirical research (Gannon et al, 2012). For instance, the presence of personality disorder in Rice and Harris’s (1996) criminal category is supported by findings that show antisocial personality disorder is particularly common in firesetters (APA, 2000; Bradford, 1982; Kolko, 1985; Kolko & Kazdin, 1991). This is in addition to support for the presence of delusions as a motivation for firesetting, since a link between firesetting and schizophrenia has also been demonstrated (Geller, 1987; McKerracher & Dacre, 1966; Richie & Huff, 1999). One could argue however, that the presence of psychopathology within Rice & Harris’s (1996) sample was expected, as it was limited to those who were mentally disordered (Gannon et al, 2012). Although one of the adjudged reasons identified by Lewis and Yarnell (1951) as to why a fire may be set was through delusions (Lewis & Yarnell, 1951), and this research was based on a sample free from mental disorder.

Shared characteristics of firesetters identified in typologies often help to initiate scholars to explain these through psychological theory, thus our attention is now shifted towards single factor theories of firesetting. Possibly the earliest single factor theory was proposed by Freud (1932), later elaborated upon by other authors (Gold, 1932; Macht & Mack, 1968). Here it was hypothesised that firesetting originates from either a urethral or oral fixated sexual drive. Firstly, youngsters are believed to experience enuresis as a means of attempting to extinguish firesetting occurring in dreams and secondly, firesetting is seen to symbolise repressed sexual urges (Gannon & Pina, 2010). Other psychodynamic accounts made use of instinctual drives, such as aggression and anxiety to explain firesetting (e. g. Kaufman, Heims & Reiser, 1961). However as there is a notorious lack of empirical evidence to offer support to psychodynamic theory (Hollin, 2013), it is unsurprising that there is little support this, or the suggestion that that those who set fires find the act sexually arousing (Rice & Harris, 1991; Quinsey, Chaplin & Upfold, 1989), or that there is a high rate of enuresis amongst firesetters.

In contrast, considerably more praise has been gathered by researchers focusing on the role of biology and neurological impairment in order to explain firesetting behaviour (Gannon & Pina, 2010). For example, evidence suggests that firesetters have decreased concentrations of cerebrospinal fluid monomaine metabolites (Roy, Virkkunen, Guthrie & Linnoila, 1986; Virkkunen, Nuutila, Goodwin & Linnoila, 1987; Virkkunen, Dejongm Bartko & Linnoila, 1989). Furthermore, Virkkunen et al (1989) found that recidivist firesetters were those most likely to have such abnormalities relative to non-recidivist firesetting, therefore suggesting that such abnormal neurotransmitter defects could account for prolonged and impulsive cases of firesetting. However as firesetting is often co-morbid with impulse disorder (Lidberg, Belfrage, Bertilsson, Evenden & Åsberg, 2000), such abnormalities are unlikely to be specific to the act of firesetting itself.

Perhaps the most supported concept relating to neuropsychological and biological theories of firesetting, is through brain injury. Evidence has found 28% of arsonists referred to forensic psychiatry services had a history of brain injury (Puri et al, 1995) and furthermore, abnormal electroencephalography readings were found amongst arsonists also when compared to non-offending and other offending controls (Bradford, 1982; Hill et al, 1982). Here it is believed that such trauma may exert an exaggerating force that leads one to engage in firesetting behaviour (Kolko, 2002).

One main area of praise for biological perspectives of firesetting is that they offer promise for rehabilitation, depending on the nature of the abnormality (e. g. provision of serotoninergic drugs for offenders with low levels of cerebrospinal fluid monomaine metabolites; JoviÄ‡, MirkovÄ‡, MajiÄ‡-Singh & MilovanoviÄ‡, 1999). However, cases of firesetting associated solely on biological causes are rare, meaning this may limit professional examination of psychological and sociological factors that are also likely to be associated with firesetting (Gannon & Pina, 2010).

The final and most contemporary single factor theory of firesetting left to address is Social Learning Theory (Bandura, 1976). The main assertion here is that firesetting is the product of reinforcement contingencies and learning through modelling or imitation (Bandura, 1976; Kolko & Kazdin, 1986; Macht & Mack, 1968; Singer & Hensley, 2004). For example, Vreeland and Levin (1980) propose that firesetting can be instantly reinforcing via sensory excitement connected to fire, in addition to the sirens, noise and crowds elicited by fire (Vreelin & Levin, 1980). Furthermore, as positive reinforcement does not necessarily need to be directly experienced for social learning to transpire, learning associated with fire may occur vicariously through mere exposure to fires (legitimate or illegitimate), or key models of firesetting behaviour (e. g. parents and caregivers; Gannon et al, 2012). In support, there is key evidence showing firstly, that firesetters fathers occupations often involve considerable exposure to fire (e. g. firemen; Stewart, 1993). Secondly, firesetters tend to be raised in environments where fire is more pervasive (e. g. countryside locations; Wolford, 1972), or used as punishment (Ritvo, Shanok & Lewis, 1983). And finally, firesetters often orginate from families with a history of firesetting (Rice & Harris, 1991).

Social Learning Theory can also be applied in conjunction with earlier discussion of firesetting typologies, of which a common category proposed was firesetting that related to revenge or was anger induced (Lewis & Yarnell, 1951; Inciardi, 1970; Rice & Harris, 1996). For example, Social Learning Theory forecasts that self-regulatory responses are created as a product of reinforcement contingencies. Consequently, poor childhood socialisation personified through exposure to negative developmental experiences and role models are likely to result in aggression, poor coping skills and a lack of assertiveness (Gannon & Pina, 2010). As there is a wealth of evidence to support the presence of such traits amongst firesetters (e. g. Ainsworth, 1989; Bowlby, 1969; Jackson et al, 1987; Rice & Chaplin, 1979; Rice & Harris, 2008; Root, Mackay, Henderson, Del Bove & Warling, 2008; Showers & Pickrell, 1987; Smith & Short, 1995), these are likely to incline individuals towards reckless behaviours (Nagin & Paternoster, 1993) and launch a propensity to light fires to gain positive environmental control (Vreeland & Levin, 1980). Thus Social Learning Theory foretells that various developmental experiences, cues, cognitive perceptions and expectations shape a person’s proclivity for firesetting, notably as a form of learnt aggression (Gannon & Pina, 2010). However one key limitation is that it is unclear which combination of factors culminates in facilitating other forms of firesetting (Gannon & Pina, 2010).

The final type of theory to consider addresses key features of previous theories to present a more holistic view to the path of firesetting, known as multifactor theories. Here, interactions are explicitly defined between individual characteristics and features of the social environmental that are integral to the decision to offend. Within this perspective there are two main approaches to consider. The first of which used Functional Analysis Theory principles (Sturmey, 2008), to explain firesetting as an interaction of antecedents and behavioural consequences (Jackson et al, 1987). Referring to their clinical experience of firesetters, research literature and tenets of Social Learning Theory, Jackson et al (1987) formulated the core associative links hypothesised to produce and reinforce firesetting. Regarding antecedents, five factors were assumed: psychosocial disadvantage, life dissatisfaction and self loathing, social ineffectiveness, factors determining the individuals’ experiences of fire and internal or external firesetting triggers (Jackson et al, 1987). Within this paradigm, firesetters are viewed as individuals who, throughout their early years experience significant social difficulties and are unable to satisfy their emotional and social needs through appropriate means (Jackson et al, 1987). However, involvement in fire and fire paraphernalia allows for some control to be exerted over their environment, which is ordinarily unobtainable to them. This is in addition to increased attention from distracted or distanced caregivers such that fire interest is positively reinforced. Such increases in personal effectiveness and self esteem, alongside sensory stimulation of the fire therefore increases interest in fire, thereby mounting the likelihood of firesetting in the future (Gannon et al, 2012). Jackson et al further add that negative reinforcement priniciples may play an equally important role in developing and maintaining firesetting. Here they suggest punitive consequences of firesetting (e. g. rejection, punishment, intense and increased supervision) may strengthen the offenders’ personal inadequacies already experienced, such that firesetting behaviours are continued (Jackson et al, 1987).

A main strength of the Functional Analysis Theory (Jackson et al, 1987) is that there is a wealth of evidence available that favours the hypothesised association between firesetting and psychosocial disadvantage (e. g. Blackburn, 1993; Geller, 1987, Hollin, 1989; Inciardi, 1970). For example, as well as being generally psychiatrically disturbed (Barnett & Spitzer, 1994), many firesetters suffer specifically from depression, low self esteem and substance abuse (Coid, Wilkins & Coid, 1999; Puri et al, 1995; Repo, 1998). What’s more, researchers also note specifically that firesetters are frequently socially inept and experience maladjustment across several life domains, such as education and employment and peer personal relations (Bradford, 1982; Harris & Rice, 1984; O’Sullivan & Kelleher, 1982; Vreeland & Levin, 1980). Although, many of these psychosocial variables are found to be common among other types of offender (Hurley & Monahan, 1969), therefore it may not be wise to generalise such findings wholly to firesetters. Nevertheless, Jackson et al’s work is deserving of praise in its unification of isolated findings and hypotheses together into one whole (Gannon & Pina, 2010), coupled with its relevance for clinicians, helping to underpin and guide contemporary treatment for firesetting (Swaffer, Haggert & Oxley, 2001; Taylor, Thorne & Slavin, 2004).

As in Functional Analysis Theory (Jackson et al, 1987), the other multifactor theory of firesetting known as the Dynamic Behaviour Theory (Fineman, 1980; 1995), followed the view that such behaviour is a product of historical psychosocial influences that shape a person’s tendency to set fires through social learning experiences. The theory stipulates that firesetting is the result of an interaction between historical factors predisposing antisocial actions (e. g. social disadvantage), previous and existing environmental reinforcers (e. g. childhood experiences) and instant environmental reinforcers (e. g. external, internal & sensory reinforcement) (Fineman, 1995). The latter is further split into numerous variables that Fineman (1995) argues should be explored by clinicians. These include, impulsivity triggers (e. g. rejection or trauma), crime scene features that may provide reasoning behind such behaviour (e. g. target of a specific individual), cognitions and affects prior to, during and post firesetting, and lastly any external (e. g. financial reward) or internal reinforcers (e. g. satisfaction or sensory satisfaction). Fineman (1995) ultimately hypothesises that firesetting stems from the culmination of interactions between these aforementioned factors, proceeding to recommend careful investigation of each when assessing and treating firesetters (Fineman, 1995).

Akin to Functional Analysis Theory (Jackson et al, 1987), Dynamic Behaviour Theory (Fineman, 1995) plays a key role in developing professional understanding of firesetting. A specific strength of this theory was that the attention paid to the more proximal variables related to firesetting, as this expresses how crucial psychological factors contribute to the development and maintenance of firesetting behaviour (Gannon & Pina, 2010). Away from these strengths however, is the problem that empirical support for this theory has largely been limited to findings from juvenile firesetters, meaning many mechanisms associated with adult firesetting are left unexplained by this theory (Gannon et al, 2012).

This evaluation has shown that the majority of empirical work undertaken with firesetters has focused on the production of typological classificatory systems and the examination of firesetter’s psychopathological and sociodemographical features. This information is useful in gaining an essential understanding of a variety of motives behind firesetting behaviour and has paved the way for scholars to address the underlying meaning of such motives through etiological theory. This in turn aims to help deliver effective treatments to firesetters. In response, several single factor theories have been applied to explain firesetting, however these are unable to explain the myriad of features that typically interact to facilitate and maintain firesetting (Gannon & Pina, 2010). Though, one key addition to single factor theories is Social Learning Theory (Bandura, 1976; Vreeland & Levin, 1980), of which key aspects featured throughout both available multifactor theories of firesetting, Functional Analysis Theory (Jackson et al, 1987) and Dynamic Behaviour Theory (Fineman, 1980; 1995). Both multifactor theories hold several strengths, particularly their focus on developmental experiences as a factor explaining interest in, and reinforcement of firesetting (Gannon & Pina, 2010). However, despite being the most appropriate method of explaining firesetting, absent from their accounts is any reference to the full range of risk factors or criminogenic needs associated with the broad range of firesetting behaviours, nor is there acknowledgement of the potential factors linked with a desistence from firesetting (Gannon et al, 2012). This inevitably led to the recent development of the Multi-Trajectory Theory of Adult Firesetting (Gannon et al, 2012) not discussed in specific detail here, but which integrated the current theory, typological, and research findings considered throughout this essay into one sizeable etiological theory of firesetting and its maintenance and desistence.