Public Perceptions and Attitudes Towards People with Arson Convictions: A Preliminary Examination and Comparison with Sexual Convictions

By

Tara Nichols

A thesis

Submitted to Victoria University of Wellington

In fulfilment of the requirements for the degree of

Master of Science in Forensic Psychology

Victoria University of Wellington

2022

Abstract

People with arson convictions face significant reintegration barriers that have the potential to compromise the desistance process. Public perceptions and attitudes have been identified as one factor which can impact the range and quality of reintegration opportunities necessary to support desistance. However, limited research to date has examined public perceptions and attitudes towards people with arson convictions. The current thesis sought to address this gap in the existing literature using two interlinked studies. Study 1 utilised a qualitative online survey with 60 student participants to qualitatively examine the content and valence of perceptions and attitudes towards people with arson convictions. Study 2 used a between-subjects experimental design to quantitatively examine similarities and differences in public perceptions and attitudes between individuals with arson and sexual convictions in a sample of 198 community participants. In addition, four open-ended questions were analysed using summative content analysis to explore the primary concerns underpinning participants' perceptions and attitudes. This research provides novel insight into the public perceptions, attitudes, and underlying concerns related to people with arson convictions. These findings have potential implications for policy and practice and can be used to inform future empirical research.

Acknowledgments

Firstly, thank you to my supervisor, Dr Nichola Tyler. I feel incredibly grateful to have received such invaluable knowledge, guidance, and mentorship from you throughout this entire process. I could not have done this without you.

I would also like to thank my incredible family; my parents, Fiona and Geoff, and my siblings Emily and Jen. Your support and encouragement have meant more to me than I can put into words.

And finally, thank you to everyone in my FPSY cohort. I could not have asked for a more accepting, kind and intelligent group of people to share this experience with, and I feel very grateful to have made such incredible friends along the way.

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Introduction

Arson offences cause extensive devastation to people, property, the community and the environment at large. Globally, tens of thousands of arson offences are committed each year (Campbell, 2021; Fire and Emergency New Zealand, 2018; Home Office, 2021; Smith et al., 2014). Fire and Emergency New Zealand (FENZ) reported that 8,729 deliberately lit fires were set in 2018, of which 2,905 were classified as unlawful. Respectively these made up 47% and 15.6% of all fire incidents attended by FENZ in 2018 (Fire and Emergency New Zealand, 2018). In the UK, approximately 48.9% of fire incidents are attributed to arson (National Fire Chiefs Council, 2019). However, due to evidentiary difficulties associated with detecting and charging individuals with arson offences, only a fraction of these incidents are processed by the criminal justice system and even fewer result in a criminal conviction (Barrowcliffe & Gannon, 2015; Edwards, 2020). For example, in the US, an estimated 3% of arson offences result in an arson conviction (Quinsey et al., 2016), and in the UK, convictions are achieved for around 8% of incidents (Office of the Deputy Prime Minister, 2003).

Although the proportion of convictions received for arson incidents are relatively low, recent statistics from the Ministry of Justice in Aotearoa New Zealand, show that 1,283 people were charged with arson between 2016 and 2020 (Ministry of Justice, 2021b), and of these people, 570 (44.4%) were convicted of arson. This equates to an average of 256.6 people charged with and 114 people convicted of arson every year. In comparison, there were 26,630 charges for sexual assault or related offences within this time period (2016-2020), 47.9% of which resulted in a conviction (Ministry of Justice, 2021a). Although youth are thought to be responsible for approximately half of all suspicious fires, the vast majority of charges and convictions are made against adults (Fire and Emergency New Zealand, 2011; Lambie et al., 2019; Ministry of Justice, 2021b). This is likely due to the focus on diversion services within Aotearoa New Zealand's youth justice system (Barretto et al., 2018).

The most common sentencing outcome for adults convicted of arson in Aotearoa New Zealand, is imprisonment (Department of Corrections, 2021). As of February 2021, the Department of Corrections reports that of the 631 people with a conviction of arson in their care, 285 (45.2%) are serving prison sentences and the remainder community-based sentences (Department of Corrections, 2021). Although arson is not as prevalent as some other offence types, these figures still show that a substantial number of people are charged, convicted, and imprisoned for arson offences within Aotearoa New Zealand every year who require rehabilitation and reintegration services.

Despite the significant number of people convicted of arson offences each year, arson remains one of the most under-researched and poorly understood forms of offending (Bell, 2015; Tyler et al., 2019). As a result, little is known about the factors that may influence rehabilitation and desistance pathways for this group. However, research indicates individuals with a history of arson face significant barriers reintegrating into the community due to the nature of their offence, including difficulties accessing accommodation, employment and reintegration programmes, which may increase their likelihood of recidivism (Allender et al., 2005; Brett, 2004; Homeless Link, 2013; Homless Link, 2014; McEwan et al., 2012; Quinsey et al., 2006). This thesis aims to address this gap by examining one factor identified in the wider offending literature as hindering reintegration and desistance; public perceptions and attitudes. More specifically, this thesis aims to conduct the first empirical investigation of public perceptions and attitudes towards people with arson convictions to begin to develop our understanding of potential barriers to reintegration and desistance for this population.

Terminology

Before reviewing the existing literature in the area, it is first important to outline and define the key terms and language used in this thesis. Arson is a legal term used to describe the unlawful setting of fires (Gannon & Pina, 2010). Due to the legal nature of this term, the

precise definition of arson varies across jurisdictions. In Aotearoa New Zealand, arson is defined under section 267 of the Crimes Act 1961 as any intentional or reckless damage to property by fire or explosives, for which the maximum sentence is 14 years imprisonment (Crimes Act (NZ), 1961). It is important to distinguish arson from the broader term fire-setting, which refers to any intentionally set fire regardless of context, target, and lawfulness (Dickens & Sugarman, 2012; Gannon & Pina, 2010). The current thesis will use the term arson when describing studies of individuals who have received a formal conviction for unlawful fire-setting; otherwise, the term fire-setting will be used.

Person-first language is used throughout this thesis when describing people with criminal convictions. Unlike offence-based labels, which define people by their offending (e.g., offender, criminal), person-first language separates the individual from their actions (e.g., a person who has offended, a person with a conviction) (Willis, 2018; Willis & Letourneau, 2018). Although offence-based labels have been heavily criticised for perpetuating the homogenisation and stigmatisation of people who have offended, they are commonplace throughout forensic literature (Willis, 2018; Willis & Letourneau, 2018). Willis and Letourneau (2018) have recently proposed new academic guidelines to encourage greater use of person-first language as a more ethical, accurate, and respectful way to describe people who have offended. In line with this, person-first language will be used throughout this thesis unless describing studies that use offence-based labels within their research design.

Reoffending and Rehabilitation of People with Arson Convictions

There have been dramatic shifts in the approach to offending rehabilitation over the last 50 years. Early perspectives centred around the pessimistic assertion that “nothing works” (e.g., Martinson, 1974) but later shifted to identifying “what works” (e.g., McGuire, 1995) as it is now widely accepted that rehabilitative interventions can effectively reduce

recidivism (Ward & Brown, 2004). In correctional practice, this has resulted in a dominant risk-needs approach (Bonta & Andrews, 2016). This approach focuses on identifying and matching an individual's recidivism risk to treatment intensity, targeting dynamic risk factors associated with reoffending and selecting an effective treatment format (e.g., cognitive behavioural therapy) to encourage responsivity (Bonta & Andrews, 2016). There is strong empirical support demonstrating that interventions following this framework can significantly reduce reoffending (Bonta & Andrews, 2016). Thus rehabilitation can act as a key component, alongside reintegration and desistance, to support individuals in moving away from crime.

Reoffending

Arson recidivism rates vary widely across the literature depending on the sample and methodological characteristics of the study (Sambrooks et al., 2021; Tyler & Gannon, 2012). Research exclusively relying on official conviction records report relatively low base rates (i.e., untreated) of recidivism, with a recent meta-analysis estimating the reoffending rate for arson as between 8% and 10% (Sambrooks et al., 2021). In comparison, estimated sexual reoffending base rates are higher at approximately 14% (Gannon et al., 2019; Sambrooks et al., 2021). However, when informal sources of reoffending information are employed to measure repeat fire-setting (e.g., self or parental/therapist report), reoffence rates increase to approximately 20% (Sambrooks et al., 2021). Comparable recidivism rates are reported for general violent recidivism in populations without fire-setting histories (21.6%) (Gannon et al., 2019; Sambrooks et al., 2021). Interestingly, individuals who set fires also have high base rates of reoffending for non-firesetting offences, with between 57% and 66% reported to recidivate with a non-firesetting offence (Sambrooks et al., 2021). The above research demonstrates that a large proportion of people convicted of arson go on to reoffend either

with fire or with a non-firesetting offence, highlighting the need to more effectively support reintegration and desistance among this population.

Several factors have been associated with fire-setting recidivism, including historical factors (e.g., unstable childhood, age of first offence, childhood fire-setting, number of incidents of fire-setting, and previous criminal history (Ducat et al., 2014; Rice & Harris, 1996; Tyler et al., 2015; Wyatt et al., 2019), individual factors (e.g., psychiatric diagnosis, learning disability, lack of interpersonal skills, impulsivity, external locus of control) (Dickens et al., 2009; Doley et al., 2011; Field, 2016; Wyatt et al., 2019) and environmental factors (e.g., social isolation, no fixed abode or transient abode, unemployment) (Ducat et al., 2013; Field, 2016; Repo & Virkkunen, 1997; Rice & Harris, 1991, 1996). Some of these factors can be addressed through rehabilitation programmes (e.g., fire interest, impulsivity, interpersonal skills). However, some (e.g., environmental factors) are addressed through reintegration and wider desistance approaches.

Rehabilitation and Desistance from Arson Offending

Within the fire-setting and general offending literature, it is hypothesised that there are two interconnected pathways out of offending: rehabilitation and desistance. Whilst rehabilitation refers to systematic efforts to support people in desisting, desistance refers to the ongoing process of moving away from crime (Göbbels et al., 2012; McNeill, 2009). Although there has been little theoretical or empirical research to date that has explored the process of desistance for people who set fires, the leading theory in the area, Multi-Trajectory Theory of Adult Fire-setting (M-TTAF; Gannon et al., 2012), hypothesises that factors identified in the wider desistance literature are also relevant to fire-setting desistance (e.g. cognitive transformations, strong social bonds, feelings of personal control, hope, and stable employment) (Gannon et al., 2012).

Despite the number of people convicted of arson each year and the relatively high rate of reoffending among this population, standardised treatment addressing unlawful fire-setting among adults is in its infancy (Bell, 2015; Tyler & Barnoux, 2020; Tyler et al., 2019). Traditionally, rehabilitative interventions to reduce fire-setting have been delivered by fire and emergency services and tailored towards children and adolescents; thus, neglecting adults within the criminal justice system (Tyler & Barnoux, 2020; Tyler et al., 2019). England represents one of the only countries globally to have developed, implemented, and evaluated standardised specialist treatment for adults who set fires with two programs known as the *Fire-setting Intervention Programme for Prisoners* (FIPP; (Gannon, 2012) and the *Fire-setting Intervention Programme for Mentally Disordered Offenders* (FIP-MO; (Gannon & Lockerbie, 2011; Gannon & Lockerbie, 2014). Both programmes are informed by the M-TTAF as well as contemporary rehabilitation theory. The M-TTAF explains fire-setting through developmental factors and experiences (e.g., caregiver experiences; social skills; learning about fire; biological and cultural influences) which influence individuals' psychological strengths and vulnerabilities (e.g., inappropriate interests in fire; cognitions on fire use; offence supportive attitudes; self and emotional-regulation issues; interpersonal difficulties) in a way which predisposes them to fire-setting (Gannon et al., 2012; Tyler & Barnoux, 2020). The FIPP and FIP-MO integrate the M-TTAF within treatment by directly addressing psychological vulnerabilities associated with fire-setting through cognitive behavioural therapy. Although these two interventions are in their infancy, preliminary evaluations have provided evidence of significant pre-post treatment improvements in psychological characteristics combined with positive feedback from participants (Gannon et al., 2015; Tyler et al., 2017).

Unfortunately, specialist treatment for adults with a history of fire-setting is not widely available internationally, with rehabilitative programmes addressing general offending

behaviour (e.g., anger management, cognitive skills, problem-solving skills) representing the most commonly offered interventions for this group (Sambrooks et al., 2021; Tyler & Barnoux, 2020; Tyler et al., 2017). Although it is tempting to presume interventions for general offending would effectively treat people convicted of arson due to their diverse criminal conduct, there is a lack of methodologically robust empirical evaluation to support this assumption (Bell, 2015; Collins et al., 2021). Further, adults imprisoned for serial arson offences in Aotearoa New Zealand have reported dissatisfaction with the available general rehabilitative programmes and expressed the need for specialised support (Haines et al., 2006). This highlights the lack of available resources to meet the rehabilitative needs of adults who set fires.

Whilst rehabilitative interventions can provide valuable support to reduce the risk of reoffending, comprehensively promoting desistance extends far beyond intervention programmes, i.e., these alone are not sufficient enough to support someone to move away from offending (Göbbels et al., 2012; Maruna & LeBel, 2010; McNeill, 2009). The traditional risk-reduction approach to treatment typically perceives the individual as the epicentre of risk. It thus focuses on addressing internal deficits (e.g., intimacy deficits, offence supportive cognitions, empathy deficits, substance abuse, emotion regulation deficits) while neglecting social and environmental factors that are key for facilitating a person to move away from offending (Fox, 2014; Göbbels et al., 2012; Ward & Brown, 2004). Supporting desistance requires a more holistic and nuanced perspective: one that recognises personal agency, that the individual is nested within their sociocultural environment, acknowledges that both internal and external factors can affect desistance, and aims not just to reduce risk but to enhance an individual's ability to lead more fulfilling prosocial life following reintegration into the community from custody (Laws & Ward, 2010; Maruna & Mann, 2019). Whilst rehabilitation programmes may play a role in the desistance process,

without considering the wider social context and the reintegration of individuals into society, they are likely to be returned to conditions that are the same, if not worse than, those that contributed to their offending in the first place. Successful reintegration is therefore imperative to the desistance process (Fox, 2014).

The Relationship Between Reintegration and Desistance

Reintegration is a challenging process where people convicted of crimes move back to the community from custody and re-establish their lives whilst also moving on from antisocial influences and behaviours. Successful reintegration allows for the establishment of foundations necessary to facilitate desistance, including establishing a secure base (e.g., house, job) and developing community ties (e.g., social and interpersonal relationships) (Fox, 2014; Göbbels et al., 2012). Desistance is recognised as a complex ongoing process rather than merely an endpoint in offending and one that requires both individual and collective community effort (Fox, 2014; McNeill, 2009; McNeill, 2016). Several scholars have distinguished between different forms of desistance, including primary (or act) desistance and secondary (or identity) desistance (Nugent & Schinkel, 2016). Primary or act desistance describes any period where offending behaviour has ceased, whereas secondary or identity desistance requires the conscious move away from antisocial behaviour and the development of a new prosocial identity (Maruna & Farrall, 2004; Nugent & Schinkel, 2016). McNeill (2016) suggests that there is also tertiary or relational desistance, related to the development of a sense of belonging within the wider community and external recognition of an individual's desistance from crime; reflecting the increasing awareness of the integral role of the wider community in supporting people pursuing desistance (McNeill, 2016).

Several theories have been proposed to explain the desistance process, including social and structural theories focusing on how factors external to the individual can provide essential social capital to encourage prosocial behaviour and restrict antisocial behaviour

(Weaver, 2019). Consistent with such theories, a plethora of empirical research has documented the association between prosocial ties to family friends, employment, stable accommodation, and education with desistance (Robinson & Crow, 2009). Sampson and Laub (1993) elaborated on the potential mechanisms underlying this association, suggesting that prosocial ties and life events (e.g. marriage, military service, and employment) act as turning points to desistance by enhancing an individual's investment in conventional society, making criminal behaviour more costly. Further, high-quality social bonds can provide informal social control mechanisms such as direct supervision, routine activities and knifing off antisocial associates that restrict an individual's opportunity to engage in antisocial behaviours (Sampson & Laub, 1993; Sampson & Laub, 2005). However, although social and structural theories such as Sampson and Laub's (1993) highlight the important role of interpersonal and societal support, they have been criticised for not sufficiently recognising the agentic role of the individual within this, i.e. how the individual perceives, reacts and responds to changes in their social context and how these internal processes interact with their environment (Weaver, 2019).

In contrast, identity and self-perception theory has been suggested to provide a greater appreciation for how internal and external factors interact throughout the desistance process (Maruna & LeBel, 2010). Maruna's (2001) leading research in this area identified distinct differences between how people who desist and those who persist with criminal conduct perceive themselves and their life circumstances. Individuals who continued to offend were found to develop condemnation scripts: a narrative of one's life characterised by an ever-present sense of helplessness and lack of control over their future (Maruna, 2001). Whereas those who desisted had adopted redemption scripts wherein they created psychological distance between their current self and previous criminal activities, allowing them to recognise themselves as changed and inherently good individuals (Maruna, 2001; Maruna et

al., 2004; Tannenbaum, 1938; Weaver, 2019). Maruna et al. (2004) hypothesise that due to the tendency for people to perceive themselves in a manner consistent with external perceptions, supportive social contexts that recognise an individual's capacity for growth can act as a catalyst for the development of a prosocial identity. Conversely, social contexts that label and stigmatise people as chronic 'offenders' incapable of change risk producing counterproductive labelling and shaming effects (Tannenbaum, 1938; Willis, 2018). When met with stigmatising labels, individuals may lose hope in their ability to pursue desistance, they may be outcast by society, and restricted from accessing basic human needs such as accommodation, employment and social capital (factors highlighted as fundamental for facilitating desistance within social and structural theories); thus, creating social barriers and leaving the individual more entrenched within a criminal identity and lifestyle (Maruna & LeBel, 2010; Tannenbaum, 1938).

Although social-structural and identity theory identify some key factors which promote desistance and highlight the importance of societal context in facilitating this, they do not outline the psychological processes involved. Serin and Lloyd (2009) addressed this gap by integrating these different theoretical perspectives into a comprehensive model of desistance and argue that commitment to change and its relationship to treatment readiness is a key mechanism initiating the change process. However, their model has been criticised for failing to fully consider the process of developing a commitment to change and the lack of attention given to the role of individual agency (Göbbels et al., 2012; Laws & Ward, 2010). Göbbels et al. (2012) extend upon this work by outlining an integrated multifactor theory model of the whole desistance process, starting from an individual deciding to initiate change and finishing with their successful reintegration. Their model, referred to as the Integrated Theory of Desistance from Sex Offending (ITDSO), comprises four phases: *decisive momentum*, *rehabilitation*, *re-entry,* and *normalcy/reintegration*.

Decisive momentum outlines how life circumstances and events (e.g., employment, property ownership, parenthood) can trigger a critical evaluation of one's identity wherein the individual may begin to recognise faults in their behaviour and imagine an idealised future prosocial self. This is thought to cultivate the readiness and openness to change necessary to actively pursue identity desistance in the second phase of rehabilitation (Göbbels et al., 2012). *Rehabilitation* outlines how the use of strength-based approaches in treatment, such as the Good Lives Model (GLM) (Ward & Maruna, 2007; Ward & Stewart, 2003), can support sustained identity transformation. The GLM asserts that all people are motivated to attain primary goods, including life, knowledge, excellence in play, excellence in work, autonomy, inner peace, relatedness, community, spirituality, happiness, and creativity (Ward & Maruna, 2007). By assisting individuals to identify their primary goods and providing the necessary internal and external resources to attain these, the development of prosocial and self-determined identity is promoted (Göbbels et al., 2012). *Re-entry* describes how successful community reintegration involves effectively adjusting to prosocial life despite the many barriers people with criminal convictions face (Laws & Ward, 2010). Stigmatisation, social exclusion, and punitive legislation are pervasive barriers that can physically (e.g., rejection from accommodation) and psychologically (e.g., hopelessness) jeopardise successful reintegration by restricting individuals from attaining primary goods. To successfully overcome these external barriers, individuals must maintain a commitment to change and retain their reinvented prosocial identity. Finally, *normalcy/reintegration* describes the need for the wider social environment to acknowledge the individual's identity transformation in order for it to be more permanently solidified. Unfortunately, this public support and acceptance is rarely a reality for people with convictions re-entering society, who are instead frequently met with negative attitudes, hostility, and stigma (Laws & Ward, 2010; Petesillia, 2009).

In sum, the research suggests that the success of reintegration and desistance largely depends on how people with convictions are regarded and treated by the wider community (Fox, 2014). Therefore, it is essential to have a comprehensive understanding of the societal perceptions and attitudes that exist towards people with criminal convictions to effectively address these reintegration barriers and facilitate the reintegration and desistance process.

Public Perceptions and Attitudes Towards People with Criminal Convictions

When discussing public perceptions and attitudes, it is important to first distinguish between these two distinct constructs. Perceptions are conceptualised as knowledge-based and emotionally neutral beliefs about a given entity (Harper et al., 2017; Jussim, 2012). As perceptions are knowledge-based, their accuracy can be assessed to determine the extent to which the beliefs are factual or misperceptions. Examples of common public misperceptions include the overestimation of general crime rates and reoffence risk (Paulin et al., 2003).

In contrast, attitudes are conceptualised as evaluative psychological tendencies reflecting favour or disfavour towards a given entity (Eagly & Chaiken, 1993; Hogue & Harper, 2019). Investigating attitudes provides a deep understanding of how a given entity is regarded, compared to perceptions which provide a more surface-level insight on how accurately a given entity is understood. An attitude can be comprised of three different components: *cognitive*, *affective* and *behavioural* attitudes (Breckler, 1984). *Cognitive* attitudes are deep-seated subjective beliefs towards a given entity (Hogue & Harper, 2019). For example, the public often believes people with criminal convictions to be dangerous and deserving of harsh punishment (Pratt & Clark, 2005; Rade et al., 2016). *Affective* attitudes represent people's visceral and automatic emotional responses towards a given entity (Hogue & Harper, 2019). Common affective attitudes towards people with criminal convictions include fear, anxiety and anger (Hartnagel & Templeton, 2012; Pratt & Clark, 2005). *Behavioural* attitudes reflect the manner in which one behaves towards or interacts with a

given entity (Hogue & Harper, 2019). The public often demonstrates negative behavioural attitudes towards people with criminal convictions, evident in the frequent use of criminal record checks to exclude applicants with convictions from employment, accommodation, and educational courses (Petesillia, 2009).

To date, the majority of the existing research on perceptions and attitudes towards crime has focused on sexual offending. This is unsurprising considering the intense public outrage associated with this offence type (Klein & Cooper, 2019; Willis et al., 2010). The existing research on attitudes towards sexual offending will now be briefly outlined to provide necessary contextual information before discussing the limited research on public responses to arson offending.

Perceptions and Attitudes Towards People with Sexual Offence Convictions

Research has consistently reported that the public has a very inaccurate understanding of people who commit sexual offences, perceiving them to be a homogenous population with a very high risk of reoffending (Harper et al., 2017; Thakker, 2012; Willis et al., 2010). Commonly endorsed myths include the beliefs that most people who sexually offend are strangers to their victims, have personal histories of sexual victimisation, and are incapable of change/rehabilitation (Cochran et al., 2020; Levenson et al., 2007). Belief in these sexual offending myths has been associated with greater endorsement of punitive and empirically unjustified legislation such as community notification (Cowan et al., 2020).

In relation to deeper attitudes held within society, research consistently reports overwhelmingly negative evaluations of people who commit sexual offences (Willis et al., 2013). Some commonly documented cognitive attitudes include the belief that people who have sexually offended are manipulative, violent, and should be sentenced to harsh punishment, including death (Hogue & Harper, 2019; Levenson et al., 2007). Common affective attitudes towards people who have sexually offended include anger, fear, disgust

and pity (Hogue & Harper, 2019; Klein & Cooper, 2019). In relation to behavioural attitudes, research suggests that the public are largely unwilling to interact with people who have sexually offended in any capacity, including living nearby, working with, socialising with, or simply being in close proximity to them (Harper et al., 2017; Willis et al., 2013).

These common negative perceptions and attitudes towards people who have sexually offended hinder desistance by compromising the range and quality of reintegration opportunities (e.g., employment, housing and social relationships), the availability and resourcing of rehabilitative treatment and community reintegration programmes, and promoting empirically unjustified punitive public policies (Brown, 1999; Willis et al., 2010). Willis et al. (2010) argue that these reintegration barriers present both an ethical and pragmatic dilemma. Ethically, hostile public responses withhold basic respect from people with criminal convictions, and pragmatically, they risk exacerbating recidivism risk putting the community in greater danger (Willis et al., 2010).

An emerging body of research has begun to explore the underlying psychological mechanisms of these perceptions and attitudes in order to inform effective interventions to reduce problematic social responses (Brown, 2009; Harper, 2016). Much of this research has focused on investigating the influence of implicit theories about the internality, stability and controllability of offending behaviour on attitudes (Harper, 2016; Harper & Bartels, 2016, 2017; Harper & Harris, 2017). Sexual offending is often believed to be due to internal factors (e.g., conscious choice to offend, sexual orientation), that are somewhat paradoxically thought to be both within the control of the individual but also result in an uncontrollable, and thus untreatable, urge to offend (Richards, 2018). These implicit theories have been most consistently associated with more negative attitudes, including beliefs about blameworthiness, untrustworthiness and that rehabilitation is underserved (Harper, 2016; Lawrence & Willis, 2021; Richards, 2018). However, attributing sexual offending to mental

illness has been associated with more positive attitudes towards rehabilitation due to mental illness being increasingly recognised as a treatable condition (Richards, 2018; Schomerus et al., 2012). Attributing child sexual offending to situational factors outside of the individual's control, such as childhood trauma, were also associated with enhanced sympathy and support for rehabilitation for some (Richards, 2018). Taken together, this research indicates that focusing on internal causes may result in a specific 'sexual offender schema' (Harper & Bartels, 2016) promoting stereotypical thinking about people who sexually offend, and that belief in changeability may be crucial to support more positive attitudes about sentencing and rehabilitation in particular (Harper & Bartels, 2016, 2017; Maruna & King, 2009).

Although this research on psychological mechanisms underpinning attitudes towards offending is still in its infancy, it has provided some important insights into areas to target as part of attitudinal change interventions. However, due to the particularly strong emotional response to this type of offending, it cannot be assumed that these complex patterns of public responses can be generalised to individuals who have committed other types of offences, such as arson.

Public Perceptions and Attitudes Towards People with Arson Convictions

Compared to the literature on public perceptions and attitudes towards people with sexual convictions, there is a paucity of research regarding public perceptions and attitudes towards individuals with arson convictions, likely related to the lack of research on arson offending more generally. However, there is some evidence to suggest that people with arson convictions face similar reintegration barriers to people with sexual convictions, including misperceptions, public outrage, and exclusion from social interaction, employment, and accommodation (Allender et al., 2005; Brett, 2004; Homeless Link, 2013; McEwan et al., 2012; Quinsey et al., 2006). It is possible that the early fire-setting literature has contributed to some of these barriers. For example, early psychiatric literature on fire-setting theorised

that people who set fires are abnormal and dangerous individuals with poor prognoses and explained fire-setting as resulting from repressed/insatiable sexual impulses (Barker, 1994; Brett, 2004; Geller, 1992; Geller et al., 1986; Nanayakkara et al., 2015; Ray, 1853). Such theories were based on small biased samples and have not received empirical support. However, they may have contributed to misinformed stereotypes, inflated perceptions of risk, and negative public responses towards people who engage in fire-setting (Barnett & Spitzer, 1994; Ó Ciardha, 2015; Quinsey et al., 2006).

High profile incidents of arson such as the deliberate bushfires that started during Black Saturday in Australia have also been shown to elicit negative public responses (Dickins et al., 2010; McEwan et al., 2012). On February 7th 2009, approximately 400 wildfires burned across Victoria Australia, four of which were suspected to have been deliberately lit (Australian Institute of Disaster Resilience, c2022; McEwan et al., 2012; Teague et al., 2010). These fires resulted in 173 fatalities and destroyed 2,029 homes and over 450,00 acres of land (Country Fire Authority, c2019; Dickins et al., 2010; Teague et al., 2010). The four suspected arson bushfires were responsible for approximately 30% of the fatalities on this day (McEwan et al., 2012; Teague et al., 2010). When an individual suspected to have deliberately set a fire on this date was identified, thousands of members of the public took to social media threatening and inciting violence towards him and his family (Dickins et al., 2010). For example, ‘Burn him like he burned those innocent people … just a lot slower’, ‘[he] deserves to suffer’ and that ‘He should die in a fire in his home’ (Milovanovic, 2009). Following Black Saturday, people who commit arson were also described as being ‘below pedophiles as the most despised individuals in society’ in the press (O'Leary, 2009). This negative sentiment appears to have persisted in Australia as more punitive legislation, including extended supervision orders and arson crime registries, were proposed in the years following (McEwan et al., 2012). Arson registries have already been implemented in several

states across the US, including California, Louisiana, Illinois, Montana and Ohio, with the intended purpose of facilitating investigations of future arson offences (National Conference of State Legislatures, 2019). These punitive responses to arson indicate that the public and policymakers consider arson a serious offence, and those who set fires are viewed as deserving of harsher punishment.

As noted earlier, little research has directly examined public perceptions towards people with arson convictions. However, a small number of studies have provided some insight into how the public view this group. For example, Casey and O'Connell (1999) investigated how consequences of various offence types influenced perceptions of crime seriousness and punishment within an Irish community-sample. Participants were presented with vignettes describing hypothetical crimes of fraud, arson, mugging, shop robbery, and burglary with varying consequences and then asked to rate the seriousness of the offence and assign an appropriate number of weeks in prison. Two arson vignettes described a fictional man who set fire to a previous place of employment, either resulting in injury to one person or ten people. Findings revealed that participants were particularly sensitive to consequence severity for arson and assigned the longest time in prison to arson compared to all other offence types. Arson resulting in one injury was assigned on average 323 weeks in prison, and arson resulting in 10 injuries assigned 454 weeks. While these findings indicate a particularly punitive response to arson, analyses were not conducted to determine if the punishment assigned to arson was statistically different from other offence types. There was also substantial variation in the harm presented across vignettes, with only the arson vignettes specifying physical injury. Thus, it is possible that findings were driven by the perceived severity of harm and not the severity of arson offences more generally.

In another study, Ghetti and Redlich (2001) investigated public perceptions on sentencing for youth perpetrated offending. Vignettes were presented to participants

manipulating the offence type (arson or firearm misuses), the perpetrator's age (11, 14, or 17 years), and consequences of offending (injury vs. death). Participants were asked to rate the perpetrator's accountability, competence, and the appropriate number of years imprisonment. Results showed that youth who committed arson received disproportionately lower sentences than youth who misused a firearm regardless of whether the crime resulted in death or injury. Interestingly, no significant differences were identified between arson and shooting for perceived accountability or competence. However, vignettes used within this study were highly detailed, specifying the perpetrator's family relationships, motivations for committing the offence and intent. This makes it difficult to determine whether findings can be generalised to understand public perceptions of youth perpetrated arson more generally. Furthermore, research suggests that the public perceive youth offending less negatively than adult offending, further restricting the generalisability of findings (Barretto et al., 2018; Scott et al., 2006).

Whilst the above studies provide some insight into perceptions, they provide limited insight into deeper attitudes towards people with arson convictions. In fact, only a handful of studies have investigated these attitudes. For example, Vogel and Meeker (2001) examined African American participants' evaluations of the wrongfulness of six different criminal offences: book fixing, arson, hostage-taking, theft, prostitution, and shooting a police officer. Participants were presented with a vignette for each offence type and asked to rate how wrong they perceived each scenario to be. Findings identified that arson was evaluated as the second most wrongful offence, with the highest being book fixing and the lowest shooting a police officer. However, variation in motivations for offending across vignettes may be reflective of this pattern of results. For example, the book fixing vignette outlined a motivation for personal financial gain, whereas vignettes describing arson and shooting a police officer were motivated by retaliation against racism. Researchers concluded that

despite the racial justification provided in the arson vignette, respondents still perceived this offence to be a highly serious, premeditated and violent crime.

Perkins et al. (2009) investigated a wider range of attitudes towards arson, considering both cognitive and behavioural domains. Within this study, 404 Indiana residents were presented with one of four vignettes, each describing a fictional 25-year-old man with schizophrenia in the community but manipulated his employment status (employed vs. unemployed) and conviction type (felony arson vs. misdemeanour alcohol offence). Participants were asked to rate their social distance to the individual across several domains, including willingness to move near, socialise with, become friends with, and have them become an in-law. Participants were also asked to evaluate the individual's propensity for violence and contribution to society. Findings showed that participants reported significantly greater social distance towards the individual who committed arson and evaluated them as being more likely to be more violent and a less productive member of society than the individual who committed the misdemeanour offence. However, it is unclear how these findings may have been influenced by the different legal statuses of these two offence types (felony vs. misdemeanour) and the inclusion of the individual's mental health status (schizophrenia). Thus, it is not possible to determine how reflective these findings are of attitudes towards arson more generally.

Hardcastle et al. (2011) focused more broadly on investigating behavioural attitudes towards people who have offended. A sample of 2,635 Victoria Australia residents were asked to rate their comfort working with and living near a person who had committed a specified offence. Seventeen different offence types were investigated, including arson resulting in injury and arson resulting in property damage. Participants reported very low levels of comfort working with and living near people convicted for either type of arson offence. In fact, out of the seventeen offence types, only four offences received lower

comfort ratings than arson resulting in injury: murder, sexual assault of an adult, accessing child pornography and sexual assault of a child. Participants were also asked to rate their level of support for government-assisted reintegration policies. Again, both arson offences received very low ratings of support compared to the other offence types. Analysis of findings identified a significant main effect of crime type on both the level of comfort and support; however, no direct comparisons between specific offence types were performed. Therefore, it is not possible to determine if arson received significantly lower ratings of comfort or support than other offence types. Despite this, these findings still indicate prominent negative behavioural attitudes towards people with arson convictions that may compromise accommodation and employment opportunities.

In addition to negative public attitudes, there is evidence to suggest that people with arson convictions are consistently excluded from employment and accommodation at a rate comparable to people with sexual convictions. Atkin and Armstrong (2011) reported that of 100 US-based employers, 78% were unwilling to hire anyone with a conviction for arson. Only two offence types were excluded to a greater extent; aggravated assault (79%) and child sexual assault (94%). Similarly, Haslewood-Pócsik et al. (2008) surveyed UK based employers and reported similarly high exclusion rates, with 71% excluding people with convictions for arson and 70% for sexual offences. The primary concerns underlying the unwillingness to hire people with criminal convictions more generally included the risk to staff and customers, the safety of the applicant, potential bad publicity, and negative attitudes of staff towards the applicant. However, these generalised concerns may not capture employers' distinct concerns regarding people with arson convictions.

With regard to accommodation, people with arson convictions are frequently described as being a particularly difficult population to rehouse when planning discharge from forensic services, which can delay their reintegration and lead to these individuals

residing longer than necessary in secure care (Völlm et al., 2017). Helfgott (1997) also found that when processing tenancy applications, property owners are particularly concerned about arson and sexual offending due to the risk to community safety and belief that the applicant would not be accepted within the neighbourhood due to their bad values. In a recent survey of UK homeless services (Homeless Link, 2013), 44% of the 500 services surveyed excluded applicants with histories of arson and 37% for sexual offending (Homeless Link, 2013). Many service providers reported that insurance policies required them to enforce blanket bans on people with arson convictions. In reality, most insurance policies stipulate that people with arson convictions can be accommodated if services have taken all reasonable steps to prevent fire-setting (Homless Link, 2014). In addition, anecdotal evidence from probation officers working in Aotearoa New Zealand, indicates that they experience similar barriers with securing private and emergency accommodation for people with histories of arson (D. Chon, personal communication, October 21, 2021; R. Sherrell, personal communication, December 6, 2021). These barriers to employment and accommodation are particularly concerning considering both transient accommodation and unemployment are associated with arson recidivism (Dickens et al., 2009; Doley et al., 2011; Field, 2016). This further highlights the need to understand public perceptions, attitudes and underpinning psychological mechanisms related to people with arson convictions in order to reduce reintegration barriers and promote desistance effectively.

The Current Study

The literature reviewed highlights that a substantial number of people are convicted every year for arson and that many of these individuals will go on to reoffend through arson or other serious crimes. In order to effectively support desistance among this group, it is essential to consider their wider social ecology as successful reintegration and desistance are inherently connected. Evidence indicates that people with arson convictions face extensive

reintegration barriers that are, in some instances, comparable to those faced by people with sexual convictions. However, no research to date has directly or comprehensively explored public perceptions and attitudes towards people with arson convictions. Those studies which do exist have focused on quantitatively measuring a few predefined perceptions and attitudes across a range of offence types and are often compromised by methodological weaknesses. Therefore, conclusions cannot be drawn about whether there are any distinct perceptions or attitudes that the public hold about people with arson convictions or how these attitudes compare to those held towards individuals who have committed other offence types (e.g., sexual offending).

Further, existing studies have tended to manipulate other variables in addition to the offence type (e.g., the perpetrator's mental health, age, motivation, intention and sociocultural context), reducing the ability to draw conclusions about whether differences in attitudes identified are related to offence type or one of the other manipulated factors (Casey & O'Connell, 1999; Ghetti & Redlich, 2001; Perkins et al., 2009; Vogel & Meeker, 2001). Additionally, the exclusive reliance on quantitative methodologies within the available literature restricts both the scope and depth of understanding of public responses to people with arson convictions. Such deductive approaches may oversimplify public responses by neglecting to explore the underlying psychological mechanisms and may not fully capture the array of perceptions and attitudes that exist towards people with arson convictions. In comparison, qualitative methodologies have been used within the sexual offending literature and have provided a deeper understanding of public perceptions and attitudes and their underlying psychological mechanisms (Richards, 2018; Thakker, 2012). This highlights a gap in the existing literature that warrants further empirical exploration. The need for research is particularly imperative considering the current reintegration barriers people with arson convictions face in securing basic human needs such as employment, accommodation and

social bonds, which ultimately compromises their desistance (Allender et al., 2005; Brett, 2004; Homeless Link, 2013; McEwan et al., 2012; Quinsey et al., 2006).

The current thesis aims to address these gaps in the literature by conducting the first direct and comprehensive investigation into public perceptions and attitudes towards people with arson convictions. It also aims to examine similarities and differences between public perceptions and attitudes towards people with arson convictions and those with sexual convictions in order to understand shared and offence-specific attitudes.

Due to the lack of existing research in the area, this research is exploratory in nature. However, it is guided by the following three research questions.

1. What are public perceptions and attitudes towards people with arson convictions in Aotearoa New Zealand?
2. What are the similarities and differences in public perceptions and attitudes towards people with arson and sexual convictions?
3. What are the primary concerns underlying public perceptions and attitudes towards people with arson convictions and people with sexual convictions?

To address these research questions, two-interlinked studies were conducted. Study 1 employed qualitative research methods to canvas the public perceptions and attitudes that exist towards people with arson convictions. Study 2 integrated findings from the first study within a mixed methods online survey to investigate any similarities and differences between perceptions, attitudes and underlying concerns related to people with arson and people with sexual convictions. It is hoped that this research will provide a richer understanding of public attitudes towards people with arson convictions and potential barriers towards reintegration and desistance for this population.

Method - Study 1

Design

This exploratory study utilised a qualitative research design and employed summative content analysis to investigate public perceptions and attitudes (cognitive, affective and behavioural) towards people with arson convictions. Qualitative research methodologies provide several notable advantages that have particular importance to the present study (Braun & Clarke, 2013a). Firstly, the flexibility of qualitative research designs allows researchers to be guided by the data and explore a wide range of perspectives and experiences. Secondly, participants have greater freedom to describe their perspectives on their terms rather than being constrained by a framework predefined by the researcher. This flexibility can result in unexpected findings that may not have been identified through traditional, purely deductive quantitative approaches. Thirdly, the richness of data produced through qualitative research facilitates a deep and nuanced understanding of participants' perspectives. These advantages make qualitative research methodologies highly appropriate for studying diverse, under-researched, or poorly understood phenomena (Braun & Clarke, 2013a).

The present study adopted a critical realist ontological orientation. Critical realism asserts that knowledge is inherently socially located, and it is through this subjective reality that one can partially access an objective reality. Thus, one's experience of reality depends entirely on their unique social context (Madill et al., 2000). Therefore, we aimed to interpret the data in a way that directly reflected the participants' personal perspectives.

The analytic approach adopted was both deductive and inductive (Potter & Levine-Donnerstein, 1999). A deductive approach was taken to focus our analysis on identifying text that indicated perceptions and cognitive, affective and behavioural attitudes towards people with arson convictions. An inductive approach was employed in that participants' responses

entirely guided the identification of perceptions and attitudes (i.e., we were not guided by any preconceived theories about what perceptions and attitudes we would find).

Participants

Participants were 100-level (first year) undergraduate psychology students at Victoria University of Wellington (VUW) recruited through the Introduction to Psychology Research Participation (IPRP) scheme. The inclusion criteria required that all participants were over 18 years of age and currently residing in Aotearoa New Zealand. All participants were recruited within their first year and first trimester of study to limit their exposure to education and create a sample more representative of the general population in terms of knowledge. This was considered important based on previous research identifying that a higher level of educational attainment is associated with less negative attitudes towards people who have committed sexual offences (Willis et al., 2013).

A total of 61 students enrolled to participate in the study. Of these, only one participant did not complete the survey, representing a response rate of 98.4%. This resulted in a final sample of 60 participants. Forty-six participants identified as female (76.7%), eleven identified as male (18.3%), and three identified as gender non-conforming (5.0%). The age of participants was measured using predefined age groupings, with the modal grouping being 18 -19 years of age (n = 45, 75%). The majority of participants identified as being New Zealand Pākehā (n = 50, 83.3%) or Other European (n = 14, 23.3%). Thirty-five percent of the sample (n = 21) identified as more than one ethnicity. Fifteen participants reported having a main occupation outside of being a student, most often in administration/sales (n = 11, 18.3%). The majority of participants reported that they did not know someone with a criminal conviction (n = 31, 51.7%), did not own private property (n = 58, 96.7%), and were not renting private property to others (n = 54, 76.7%). Although, it is notable that fewer participants reported owning property than did renting their property to others, suggesting

some level of misunderstanding of the latter question. See Table 1 for a full breakdown of demographic details collected.

Table 1

Demographic Composition of Study 1 Sample

Demographic Characteristic	Frequency	%
Age		
18-19	45	75.0
20-29	11	18.3
30-39	4	6.7
Gender		
Female	46	76.7
Male	11	18.3
Gender non-conforming	3	5.0
Other	0	0
Ethnicity		
NZ Pākehā	50	83.3
Other European	14	23.3
Maori	11	18.3
Other Asian	4	6.67
Samoan	2	3.33
Chinese	2	3.33
Tokelauan	1	1.67
Indian	1	1.67
Middle Eastern	1	1.67
Other	1	1.67
Occupation		
Student	45	75.0
Administration/Sales	11	18.3
Hospitality or Tourism	4	6.7
Education		
Bursary/University Entrance/NCEA Level 3	49	81.7
Tertiary (post-school) certificate or diploma	8	13.3
Sixth Form Certificate/ NCEA Level 2	2	3.3
School Certificate/NCEA Level 1	1	1.7
Property owner		
No	58	96.7
Yes	2	3.3
Property rental		
No	54	76.7
Yes	6	18.3
Know someone with a criminal conviction		
No	31	51.7
Yes	26	43.3
Prefer not to say	3	5.0

Note: The percentage of participants across ethnicities adds up to more that 100% as participants were able to select more than one ethnic identity.

Measures

Participants completed an online qualitative survey administered through Qualtrics. Qualtrics is an online survey platform that allows for survey creation and distribution to the public (Peer et al., 2021). Qualitative surveys are well suited to canvassing a wide range of responses to broad research questions (Braun & Clarke, 2013b; Braun et al., 2020). Surveys administered online provide several advantages, including easy distribution, enhanced accessibility to geographically dispersed populations and cost-efficiency compared to interactive qualitative data collection methods (Braun & Clarke, 2013b; Braun et al., 2020). The high level of anonymity provided through online surveys is also beneficial to prompt participant disclosure when studying sensitive topics and those influenced by social desirability (Braun et al., 2020), such as criminal and deviant behaviours (Gadd et al., 2011; Jahnke, 2018). For example, socially desirable responding has been associated with more punitive attitudes and higher perceived dangerousness in relation to people with paraphilic sexual interests (Jahnke, 2018).

The survey was comprised of three sections presented in a standardised order. The first section included eight multiple-choice demographic questions. Participants were asked to provide their age, gender identity, ethnicity, current occupation, level of education, if they currently owned private property, were currently renting private property, and if they personally knew someone with a criminal conviction. These demographic details were collected to provide a more comprehensive understanding of our sample.

Following demographic questions, participants were presented with 13 open-ended questions designed to capture their perceptions and attitudes towards people with arson convictions. These questions were informed by prior qualitative research investigating public perceptions and attitudes towards people with sexual offence convictions within Aotearoa New Zealand (Thakker, 2012). Questions included a combination of broad and more focused

open-ended questions (Braun et al., 2020). Broad open-ended questions allowed for a more diverse range of perceptions and attitudes to be captured. More focused open-ended questions were included to ensure we assessed each attitudinal component being investigated (perceptions, cognitive, affective and behavioural attitudes); however, these questions were also designed in such a way that they were not restricted to just assessing a single component. An example of a broad open-ended question includes; *What are your first thoughts when you think of someone who has been convicted of an arson offence?* An example of a more focused open-ended question includes; *How do you think you would behave towards someone with an arson conviction?,* which was designed to capture behavioural attitudes. All 13 open-ended questions are outlined in Table 2 below in the standardised order they were presented to participants.

Four quantitative questions were included at the end of the survey to supplement the qualitative data. These quantitative questions were designed to measure the perceived dangerousness of people with arson convictions in the context of other diverse crime types. Participants were asked to rate how dangerous they perceived someone with an arson conviction to be compared to those with convictions for sexual, violent, criminal damage and theft offences. Responses were provided on a 7-point Likert scale, ranging from 0 (much less dangerous) to 6 (much more dangerous).

Table 2

Qualitative Survey Questions

Order	Question
1	What do you know about people with arson convictions?
2	What characteristics do you think people with arson convictions have?
3	Why do you think people might commit arson offences?
4	Where does your information about people with arson convictions come from?
5	What are your first thoughts when you think of someone who has been convicted of an arson offence?
6	What emotions do you feel when you think of someone who has been convicted of an arson offence?
7	How do you think people who have committed an arson offence should be sentenced?
8	How do you think you would behave towards someone with an arson conviction?
9	Do you think people with arson convictions are dangerous? If so, who do you think they are dangerous to?
10	Do you think people with arson convictions can be rehabilitated?
11	What, if any, support do you think people with arson convictions would need to reintegrate back into the community?
12	Do you think people with arson convictions may experience any barriers to reintegrating into the community?
13	What, if any, concerns do you have with regard to someone with an arson conviction being released back into the community?

Procedure

The research project was approved by the VUW Human Ethics Committee on 10th December 2020 (reference: 0000028731). The study was published and advertised to prospective participants on 1st March 2021, the first day of trimester one at VUW. An advertisement for the study was posted on the online cloud-based Sona-System, available to VUW students enrolled in the IPRP scheme. IPRP forms part of the first undergraduate introduction to psychology courses and aims to introduce students to the core concepts and research methods applied in psychology (Victoria University of Wellington, 2021). The total sample size was recruited by 12th March 2021.

To access the survey, participants were provided with a confidential survey link that redirected them to Qualtrics. Participants were first presented with the information form, outlining the research topic along with contact details for free and local support services for

participants who wished to seek support related to the research content. Participants were required to confirm their informed consent before proceeding on to the survey questions. Following this, participants completed the demographic questions (see Appendix A) proceeded by the thirteen open-ended questions and the four quantitative questions (see Appendix B). All survey questions were optional, and participants could move backwards and forwards through the survey if they wished to amend prior responses. After completing the survey, participants were presented with the debrief statement and awarded 0.5 credit points towards their first-year psychology course.

Data Analysis

Responses to qualitative survey questions were analysed using summative content analysis as outlined by Hsieh and Shannon (2005). Content analysis is a methodological technique of condensing text-based data into clearly defined categories (Neuendorf, 2017; Stemler, 2001). This was considered appropriate as content analysis provides "an empirical basis for monitoring shifts in public opinion" (Stemler, 2001). A summative approach to content analysis aims to both quantify word usage and explore the underlying meaning of the text being studied (Hsieh & Shannon, 2005). The quantitative aspect of summative content analysis engages a semantic level of analysis, focusing on the occurrence of particular words or content within the text. Whilst the interpretive component of summative content analysis requires a latent level of analysis, one that extends beyond the surface level of text to explore the underlying beliefs, ideas and perspectives that have contributed to text formation (Hsieh & Shannon, 2005).

Summative content analysis was conducted in five main phases: (1) data organisation, (2) data familiarisation, (3) generating the initial coding framework, (4) review and refinement of the initial coding framework, (5) generating the final coding framework. The first phase of data organisation involved compiling each participants' survey responses into

an individual ‘transcript’. This format allowed data to be more easily reviewed and treated as one cohesive dataset throughout analysis instead of focusing on individual questions separately (Braun & Clarke, 2019). The average word count across transcripts was 241.2 words (*SD* = 154.6).

The second phase of data familiarisation required the primary researcher to become fully immersed within the data by reading all transcripts in their entirety twice (Hsieh & Shannon, 2005). During this process, the primary researcher made notes of their first impressions of the data and points of interest within and across transcripts.

The third phase involved generating an initial coding framework. This phase was approached separately for each distinct component being investigated (perceptions and cognitive, affective, and behavioural attitudes). Focusing on a single attitudinal component, the primary researcher reviewed and coded the first ten transcripts. Each transcript was coded individually by identifying units of meaning - sections of text that captured key thoughts or concepts relevant to the attitudinal component being examined. These units of meaning were then labelled as codes that functioned as short descriptive labels capturing the core meaning of what participants wrote. Codes were derived directly from participants’ responses using a mix of deductive (i.e., focused on identifying particular attitudes) and inductive approaches (i.e., content driven by the data) to analysis. Latent analysis was employed at this stage to interpret the meaning and relatedness of different codes. Codes capturing the same underlying meaning were collapsed and renamed. Comprehensive definitions and coding protocols for all emergent codes were developed to complete the initial coding framework.

During the fourth phase, the primary researcher and research supervisor collaboratively reviewed and refined the initial coding framework. The research supervisor’s involvement within this phase provided triangulation of thinking through suggesting alternative perspectives and checking that code names and definitions accurately reflected the

data. This review was also necessary to ensure that the initial coding framework was exhaustive and that all categories developed were mutually exclusive, independent, and relevant to the research question but did not over fragment the data (Stemler, 2001). Refinements to the initial coding framework were made during this process until both the primary researcher and research supervisor were satisfied that codes within the framework accurately described the data.

In phase five, the primary researcher coded the remaining 50 transcripts using the initial coding framework. If new codes were identified, these were either added to the coding framework or existing codes refined where the new code had shared meaning with an existing code. Once the remaining transcripts had been coded, the primary researcher re-examined all transcripts to ensure that the coding framework had been implemented consistently throughout. The coding framework and coded data were then reviewed by both the research supervisor and the primary researcher. The supervisor's role within this process was to provide triangulation of thinking, similar to phase four. Once all refinements were made to both the coding and the coding framework, the primary researcher repeated the coding process from phase two onwards for the remaining attitudinal components. Once complete, this produced four independent final lists of codes, one for each attitudinal component (i.e., perceptions and cognitive, affective, and behavioural attitudes).

Inter-rater Reliability

Each coding framework was individually assessed for inter-rater reliability to determine the reproducibility of coding protocols (Stemler, 2001). A secondary coder was selected to independently code 10% of the data (6 transcripts) for each of the four final coding frameworks (Neuendorf, 2017). To avoid artificially inflating the reliability coefficient, we selected a secondary coder who had no prior involvement with the research project, had limited knowledge of the existing literature related to the research topic and had

limited prior contact with the primary researcher (Stemler, 2001). The secondary coder was trained in using the coding framework and provided with one transcript to practice implementing coding protocols. Following this, the secondary coder began independently coding six randomly selected transcripts using the coding framework. The percent of agreement between coders was calculated before discussing any coding inconsistencies (Stemler, 2001). This was calculated by adding all instances where both the primary researcher and secondary coder coded the same unit of meaning in the same way and dividing this number by the total number of cases. The percentages of agreement calculated for each coding framework were 89% for perceptions, 80% for cognitive attitudes, 80% for affective attitudes, and 87% for behavioural attitudes.

Fleiss' Kappa was calculated for each coding framework to account for expected chance rate agreement between coders (Fleiss, 1971). Fleiss' Kappa was selected due to its ability to accommodate for the presence of multiple categories (Landis & Koch, 1977). Coefficient values were interpreted using Landis and Koch's (1977) benchmarks outlining values of >.81 reflect almost perfect, >.61 substantial, >.0.41 moderate, >.21 fair, >0.00 slight and <0.00 poor strength of agreement. The perceptions coding framework attained a near-perfect level of agreement with $k = 0.88$. Coding frameworks for cognitive, affective and behavioural attitudes all attained a substantial level of agreement with Fleiss kappa coefficients of 0.78, 0.76 and 0.79, respectively.

Results - Study 1

The frequency of each perception and attitude reported within the sample was calculated by summating the total number of participants who reported the perception or attitude at least once. These findings, information on participants' sources of knowledge on arson, and responses to the quantitative questions on dangerousness are now discussed.

Source of Participants' Knowledge on Arson

Most participants reported that their knowledge of people with arson convictions originated from mass media (*n* = 40, 66.7%) sources followed by personal beliefs (*n* = 20, 33.3%). Only 2 (3.3%) participants stated that their knowledge had come from academic literature (see Table 3).

Table 3

Source of Participants' Knowledge on People with Arson Convictions

Source of knowledge	Frequency	%
Media (TV, online, news media)	40	66.7
Personal thoughts and beliefs	20	33.3
Society/Other People	7	11.5
Relevant personal experiences	5	8.3
Academic literature	2	3.3

Note: Percentages add up to more than 100% as participants could cite multiple sources of information

Perceptions of People with Arson Convictions

Forty-four distinct perceptions of people with arson convictions were identified within participants qualitative responses. These perceptions could be organised into seven domains: (1) how arson is legally defined, (2) characteristics of people with arson convictions, (3) motivations for committing arson, (4) dangerousness of people with arson convictions, (5) risk of reoffending, (6) capacity for rehabilitation and (7) sentencing and treatment needs of people with arson convictions.

How Arson is Defined Legally

A large proportion of participants defined arson as involving deliberate and intentional fire-setting (*n* = 14, 23.3%). Few participants commented on the severity of arson, but most of those who did classified arson as a minor offence (*n* = 4, 6.7%). Only two participants (3.3%) explicitly reported the perceptions that arson predominantly targets property without the endangerment of human life (see Table 4).

Table 4

Perceptions of how Arson is Legally Defined

Category	Definition	Example	Frequency	%
People who have committed arson have engaged in deliberate fire-setting.	People who commit arson are described to have knowingly and deliberately engaged in fire-setting.	"People with arson convictions have been tried in court and found guilty of purposefully starting a fire"	14	23.3
People commit arson accidentally.	People who commit arson are described to have started a fire unintentionally or by accident.	"Sometimes even when it's an accidental fire people can be convicted"	5	8.3
Arson is a minor offence.	Arson is described as being a minor offence or not very serious.	"It's not a crime I consider to be extremely bad compared to murder and other violent acts"	4	6.7
Arson is a crime that involves property not people.	Arson is described as not endangering or involving people as it is a crime that only involves property.	"In my opinion arson revolves more around buildings than people"	2	3.3
Arson is a serious offence.	Arson is described as being a serious offence.	"That is quite a serious crime"	1	1.7

Note: Percentages add up to more than 100% as participants could report multiple perceptions

Characteristics of People with Arson Convictions

A large proportion of participants perceived that people with arson convictions experience mental illness (*n* = 18, 30.0%), are addicted to fire (*n* = 13, 21.7%), have experienced difficult lives (*n* = 12, 20.0%) or are young (*n* = 9, 15%). The least frequently perceived characteristics included the belief that people with arson convictions are male (*n* =

2, 3.3%), emergency first responders (*n* = 2, 3.3%) and sexually attracted to fire (*n* = 1, 1.7%) (see Table 5).

Table 5

Perceptions of the Characteristics of People with Arson Convictions

Category	Definition	Example	Frequency	%
People with arson convictions are mentally ill.	People with arson convictions are described as having mental illnesses (excluding pyromania).	"Especially due to the fact that 90% of arson committers are mentally ill"	18	30.0
People with arson convictions are addicted to fire.	People with arson convictions are described as experiencing addiction, obsession, or attraction to fire.	"They have an obsession towards fire and have an instinctual need to burn things"	13	21.7
People with arson convictions have difficult lives.	People with arson convictions are described as having experienced difficult/traumatic lives.	"They probably have endured trauma or constant conflict in their lives"	12	20.0
People who commit arson tend to be young	People with arson convictions are described as being young in age.	"I mostly think of arsonists being young"	9	15.0
People with arson convictions are socially detached/isolated.	People with arson convictions are described as being socially isolated or having poor interpersonal relationships.	"Obviously a bit of an introvert I guess"	6	10.0
People with arson convictions have substance abuse problems	People with arson convictions are described as abusing drugs and/or alcohol.	"Some also abuse alcohol or drugs which fuel the arson attacks"	5	8.3
People commit arson in groups/gangs.	Arson is described as being committed within groups/gangs or because of group pressure.	"Likely doing it due to mob mentality and their anonymity within the mob"	5	8.3
People with arson convictions are unemployed/ have a low socio-economic status	People with arson convictions are described as being unemployed, of low socio-economic status or experiencing financial difficulties.	"I believe that they were raised in a poor lifestyle, with minimum support financially"	5	8.3
People with arson convictions are uneducated.	People with arson convictions are described as being uneducated or lacking access to education.	"Likely to be uneducated or limited education"	3	5.0
People who commit arson are male.	People with arson convictions are described as being male.	"I would assume predominantly males are arsonists."	2	3.3

People with arson convictions are emergency first responders.	People with arson convictions are described as being firefighters or first responders.	"I understand that often people who commit arson may be firefighters themselves"	2	3.3
People with arson convictions are sexually attracted to fire.	People with arson convictions are described as having a sexual attraction to fire.	"Could be a sexual turn on for some"	1	1.7

Note: Percentages add up to more than 100% as participants could report multiple perceptions.

Motivations for Committing Arson

A large proportion of participants perceived that arson was committed to express emotions (*n* = 19, 31.7%), followed by revenge/retaliation (*n* = 15, 25%), insurance fraud (*n* = 11, 18.3%) and to destroy property/land (*n* = 9, 15%). The least common perceived motivations for committing arson included; the desire to self-sooth (*n* = 2, 3.3%), to be seen as a hero (*n* = 2, 3.3%), to feel powerful (*n* = 2, 3.3%), and to destroy evidence (*n* = 2, 3.3%) (see Table 6).

Table 6

Perceptions of Motivations for Committing Arson

Category	Definition	Example	Frequency	%
Motivated to express emotions.	Arson is described as being motivated by intense emotions and the desire to express these emotions.	"They are mad and burning something may release that anger to a certain extent"	19	31.7
Motivated to take revenge/retaliate.	Arson is described as being motivated by feeling personally wronged and the desire to seek revenge or retaliate.	"I believe that most of the time this is for revengeful reasons"	15	25.0
Motivated by insurance fraud or financial gain/profit.	Arson is described as being motivated by insurance or financial gain.	"I know that commonly people who commit arson are trying to commit a type of insurance fraud"	11	18.3
Motivated to destroy property/land.	Arson is described as being motivated by a desire to cause destruction to a piece of property, land, place, or object.	"They've attempted or succeeded in harming others property by fire"	9	15.0
Motivated to hurt someone/	Arson is described as being motivated by a desire to cause direct injury to someone or endanger human life.	"Well I know that arson is the crime of lighting fires	7	11.7

endanger their life.		with the intent to do harm/kill others"		
Motivated by personal enjoyment/ satisfaction.	Arson is described as being motivated by the sense of pleasure, enjoyment, or satisfaction it provides.	"Perhaps because they get a sense of pleasure or satisfaction out of the experience"	7	11.7
Motivated by the thrill of it.	Arson is described as being motivated by the sudden feeling of excitement, adrenaline or thrill that fire-setting provides.	"For the adrenaline rush they may get out of setting things on fire"	6	10.0
Motivated to get attention from others/ as a cry for help.	Arson is described as being motivated by the desire for attention from others or as a way of communicating to others that help is needed.	"Could be a cry for attention"	4	6.7
Motivated to feel in control.	Arson is described as being motivated by the desire to take or feel in control of something.	"To feel as if they're in control"	4	6.7
Motivated by jealousy.	Arson is described as being motivated by feelings of envy caused by someone else's possessions, qualities, or luck.	"Could be jealous of something"	4	6.7
Motivated by boredom.	Arson is described as being motivated by feeling bored or having nothing better to do.	"Perhaps they are bored and want something to do"	3	5.0
Motivated by a desire to self-sooth.	Arson is described as being motivated by a desire to reduce pain/discomfort, or because arson is calming/soothing.	"They think that setting a large fire gives …relief"	2	3.3
Motivated by a desire to be seen as the hero.	Arson is described as being motivated by the desire to be seen as a hero/saviour.	"Lights the fire in order to put them out and save the day, fulfilling their need to be viewed as a saviour"	2	3.3
Motivated by a desire to feel powerful.	Arson is described as being motivated by a desire to feel power or strength.	"To feel sense of power"	2	3.3
Motivated by a desire to destroy evidence from another crime.	Arson is described as being motivated by the need to destroy evidence connected to another crime.	"They might want to remove evidence of a crime, such as covering a burglary"	2	3.3

Note: Percentages add up to more than 100% as participants could report multiple perceptions

Perceptions of Dangerousness

The majority of participants (n = 47, 78.3%) perceived people with arson convictions to be dangerous and only nine participants (15%) perceived them not to be dangerous (see Table 7).

Table 7

Perception of the Dangerousness of People with Arson Convictions

Category	Definition	Example	Frequency	%
People with arson convictions are dangerous	People with arson convictions are described as being dangerous to society, specific people, themselves or the environment.	"Yes, they are a danger to anyone. Both strangers and loved ones"	47	78.3
People with arson convictions are not dangerous	People with arson convictions are described as not being dangerous to society, specific people, themselves or the environment.	"No, I don't think they are particularly dangerous"	9	15.0

Rehabilitation Viability

An overwhelming majority of participants (*n* = 55, 91.7%) perceived rehabilitation to be possible for people with arson convictions. Only one participant (1.7%) reported that rehabilitation is "probably not" possible for this group (see Table 8).

Table 8

Perception of Rehabilitation Viability

Category	Definition	Example	Frequency	%
People with arson convictions can/should be rehabilitated	Rehabilitation is described as being possible for people with arson convictions.	"I believe it is possible to rehabilitate arsonists"	55	91.7
People with arson convictions cannot be rehabilitated	Rehabilitation is described as being impossible for people with arson convictions.	*[Q10: Do you think people with arson convictions can be rehabilitated?]* "Probably not"	1	1.7

Perceptions of Reoffence Risk

The majority of participants (*n* = 46, 76.7%) expressed the belief that people with arson convictions are likely to reoffend following their reintegration into the community. Only two (3.3%) participants perceived a low risk of reoffending for those with arson convictions (see Table 9).

Table 9

Perceptions Reoffence Risk for People with Arson Convictions

Category	Definition	Example	Frequency	%
People with arson convictions are likely to reoffend	Reoffending among people with arson convictions is described as likely or as a pressing concern.	"Obviously there will always be the thought of will they do it again"	46	76.7
People with arson convictions are unlikely to reoffend	People with arson convictions are described as being unlikely to reoffend.	"Generally, it's something done on an old empty building when someone is young and dumb and isn't repeated"	2	3.3

Sentencing and Treatment Needs

Most participants perceived that people with arson convictions required psychological interventions to address their mental wellbeing (*n* = 37, 61.7%). The perceptions that people should be sentenced to prison (*n* = 27, 45%) and provide reparations (*n* = 18, 30%) were also commonly reported. Only six participants (10%) perceived that people with arson convictions require fire specific interventions targeting their interest in fire, knowledge of fire or access to fire-setting paraphernalia (see Table 10).

Table 10

Perceptions of Sentencing and Treatment Needs of People with Arson Convictions

Category	Definition	Example	Frequency	%
People with arson convictions need psychological interventions/support.	People with arson convictions are described as needing psychological interventions to support their psychological wellbeing.	"I think some psychiatric help is definitely needed"	37	61.7
People with arson convictions should be imprisoned or sent to prison/jail.	People with arson convictions are described as needing to imprisoned.	"I think a jail sentence of around 5 years sounds roughly right"	27	45.0
People with arson convictions should provide reparations for their crime.	People with arson convictions are described as needing to provide reparations for their crimes (e.g., monetary fine, community service or volunteering).	"Perhaps they should do mandatory service to help those who've been in arson related incidents"	18	30.0
People with arson convictions should be monitored/ supervised.	People with arson convictions are described as requiring supervision or monitoring.	"I think they should be monitored"	8	13.3
People with arson convictions should have fire specific interventions.	People with arson convictions are described as needing interventions specifically targeting fire-setting e.g., addressing fire interest, enhancing fire safety knowledge, or restricting access to fire-setting paraphernalia.	"Think they should … go to an arsonist anonymous group to talk about how their feeling and their temptations"	6	10.0

Note: Percentages add up to more than 100% as participants could report multiple perceptions

Cognitive Attitudes Towards People with Arson Convictions

Thirty-six distinct cognitive attitudes were identified (see Table 11). The most prevalent cognitive attitudes included; the belief that people with arson convictions are emotionally unstable (*n* = 18, 30%), untrustworthy (*n* = 10, 16.7%), lack intellectual abilities (*n* = 10, 16.7%), are mentally unstable (*n* = 9, 15%), and are behaviourally unstable (*n* = 9, 15%). Several cognitive attitudes were only expressed by only one participant.

Table 11

Cognitive Attitudes Towards People with Arson Convictions

Category	Definition	Example	Frequency	%
People with arson convictions are emotionally unstable.	People with arson convictions are described as being unable to effectively express, regulate or control their emotions.	"They have proved they can't control their emotions"	18	30.0
People with arson convictions are untrustworthy.	People with arson convictions are described as being untrustworthy, or that people are unwilling/unable to trust them.	"I wouldn't trust them"	10	16.7
People with arson convictions lack intellect/intellectual abilities.	People with arson convictions are described as lacking intellect, knowledge or cognitive abilities.	"They could genuinely just be stupid"	10	16.7
People with arson convictions are mentally unstable.	People with arson convictions are described as having erratic or irrational psychological functioning.	"They're crazy"	9	15.0
People with arson convictions are behaviourally unstable.	People with arson convictions are described as being unable to control their impulses and acting spontaneously without any self-restraint.	"They would be hurt and usually impulsive"	9	15.0
People with arson convictions disregard potential consequences.	People with arson convictions are described as not caring about possible consequences of their actions.	"They're reckless and don't think things through as well as they probably should do"	6	10.0
People with arson convictions put themselves above other people.	People with arson convictions are described as valuing their personal needs above others.	"They are willing to put themselves ahead of others"	6	10.0
People with arson convictions are generally unstable.	People with arson convictions are described as generally lacking self-control or as being unstable, without specifying a domain this instability is evident in.	"I think they could be unstable"	5	8.3
People with arson convictions deserve to be punished for their crimes.	People with arson convictions are described as deserving harsh punishment due to their unacceptable crimes.	"Oh my gosh, I hope this person is punished for what they have done"	5	8.3
People with arson convictions deserve to be treated with decency and respect.	People with arson convictions are described as deserving respect and kindness from others and not to be seen as criminals.	"They should be treated like anyone else"	5	8.3

People who commit arson just want to create chaos.	People with arson convictions are described as getting enjoyment from creating chaos or terror.	“Notable some who relish in chaos”	5	8.3
People with arson convictions are just bad people.	People with arson convictions are described as being inherently bad people or having evil traits.	“I think of them … only committing the crime for evil”	4	6.7
People with arson convictions are defiant.	People with arson convictions are described as being resistant to authority/opposition.	“Being rebellious, defiant”	4	6.7
People with arson convictions are menaces to society.	People with arson convictions are described as having a character that causes others annoyance/disapproval.	“They are troublesome”	3	5.0
People with arson convictions are socially inadequate	People with arson convictions are described as having inadequate social capabilities.	“Socially inept”	3	5.0
People with arson convictions deserve a second chance.	People with arson convictions are described as deserving of a chance to redeem themselves.	“I believe everyone deserves a second chance”	3	5.0
People with arson convictions are not to blame for their crimes	Blame for arson offences is shifted away from the individual and onto external/situational factors.	“It may 'not be their fault' in the way their circumstances made them what they are.”	3	5.0
People with arson convictions are irresponsible.	People with arson convictions are described as being ill-equipped to manage responsibility.	“They are irresponsible”	3	5.0
People with arson convictions are people just like everyone else.	People with arson convictions are described as being equal to everyone else in society.	“I believe as such they are at heart normal members of society”	3	6.7
People with arson convictions have good intellectual abilities.	People with arson convictions are described as having advanced intellect allowing them to plan out and commit their offences.	“They could also be very planned out and methodical”	2	3.3
People with arson convictions are underachievers.	People with arson convictions are described as having achieved little or less than is expected of them.	“Haven't achieved much in their lives”	2	3.3
People with arson convictions are immoral.	People with arson convictions are described to be lacking socially accepted moral values.	“I disagree with the moral actions involved in their conviction”	2	3.3
People with arson convictions have a negative view of the world.	People with arson convictions are described as having a bleak/negative outlooks on life.	“Possibly nihilism”	2	3.3
People with arson convictions are daring.	People with arson convictions are described as being brave and willing to take risks.	“They're daring.”	2	3.3

People with arson convictions cannot/should not be forgiven.	Responses stating that people with arson convictions should not or could not be forgiven for their crimes.	"They could/should never be forgiven for what they did"	2	3.3
People with arson convictions can/should be forgiven.	Responses stating that people with arson convictions should or could be forgiven for their actions.	"I would certainly be hostile towards some and more forgiving towards others"	1	1.7
People with arson convictions don't feel remorse for their crimes.	People with arson convictions are described as not feeling remorse/guilt for their crimes.	"Lack of remorse"	1	1.7
People with arson convictions are misunderstood by society.	People with arson convictions are described as being misrepresented/misunderstood by society.	"They are probably misunderstood"	1	1.7
People with arson convictions are cowardly.	People with arson convictions are described as lacking courage or behaving cowardly.	"It seems like a very cowardly way to cause such destruction"	1	1.7
People with arson convictions are submissive.	People with arson convictions are described as being submissive or easily coerced by others.	"Those who are submissive could act under the influence of other"	1	1.7
People with arson convictions are dishonest.	People with arson convictions are described as being prone to lying or dishonesty.	"People who commit arson probably have characteristics such as dishonesty"	1	1.7
People with arson convictions are petty.	People with arson convictions are described as caring too much about trivial details, characterised through pettiness.	"Excessive or petty"	1	1.7
People with arson convictions are jealous.	People with arson convictions are described as having characters that makes them jealous of perceived advantages of others.	"Jealousy"	1	1.7
People with arson convictions have poor hygiene.	People with arson convictions are described as being unhygienic or lacking good hygiene.	"Poor hygiene"	1	1.7
Committing arson is unjustified.	Responses describing that reasons for committing arson are not legitimate or justified.	"Their reason for burning something probably won't justify their actions"	1	1.7
Committing arson can be justified.	Responses stating that arson can be justified in specific hypothetical conditions.	"If someone was protesting against slavery then they should be punished for destruction but less so because their actions are pure"	1	1.7

People with arson convictions are confident.	People with arson convictions are described as being confident in themselves or their abilities.	"I believe they would carry characteristics of either very confident or very submissive"	1	1.7
People with arson convictions lack confidence.	People with arson convictions are described as having a weak sense of self or low self-regard.	"I also pity their low self-worth"	1	1.7

Note: Percentages add up to more than 100% as participants could report multiple cognitive attitudes

Affective Attitudes Towards People with Arson Convictions

Ten affective attitudes toward people with arson convictions were identified (see Table 12). The most prevalent affective attitudes included; anger (*n* = 20, 33.3%), worry/anxiety (*n* = 15, 25%), general sadness (*n* = 14, 23.3%), pity (*n* = 12, 20%) and confusion (*n* =11, 18.3%). The least common affective attitudes included; shock/horror (*n* = 2, 3.33%) and empathy (*n* = 4, 6.67%).

Table 12

Affective Attitudes Towards People with Arson Convictions

Category	Definition	Example	Frequency	%
Anger	Strong feelings of displeasure or disapproval towards people with arson convictions or related to the consequences of their offence.	"Annoyance, at their destruction of property"	20	33.33
Worry/anxiety	Feelings of worry, anxiety, or concern due to an unknown, suspected, or imagined threat related to people with arson convictions.	"Not scared, but anxious"	15	25.0
General sadness	General feelings of sadness, sorrow, or loss, that are not directed towards specific individuals.	"Pain & upset"	14	23.3
Pity	Feelings of pity or sympathetic sadness directed towards others due to perceived misfortunes.	"I feel sorry for them"	12	20.0
Confusion	Feeling perplexed/confused towards people with arson convictions.	"Confusion as to why they felt the need to do that"	11	18.3
Fear	Strong negative emotional response of fear because people with arson convictions are recognised as definite immediate threats.	"People will probably now fear them"	8	13.3
Curiosity	Feeling a desire to learn more about people with arson convictions due to uncertainty, novelty, or complexity.	"To be honest mostly a lot of curiosity as to their reason like what and why"	8	13.3
Disappointment	Negative emotional response to people with arson convictions due to the non-fulfilment of one's hopes or expectations.	"Depends what damage it caused - if loss of life, then with anger and disappointment in this person."	6	10.0
Empathy	Feeling shared emotions with people with arson convictions.	"Empathy, understanding"	4	6.7
Shock/horror	Feeling sudden and intense shock or surprise towards people with arson convictions.	"Shocked and curious"	2	3.3

Note: Percentages add up to more than 100% as participants could report multiple affective attitudes

Behavioural Attitudes Towards People with Arson Convictions

Eleven behavioural attitudes were identified (see Table 13). The most prevalent behavioural attitudes included; treating someone with an arson conviction the same as everyone else (*n* = 25, 41.7%), acting with caution around people with arson convictions (*n* = 19, 31.7%) and creating or maintaining physical distance with people with arson convictions (*n* = 11, 18.3%). The least common behavioural attitudes included; treating people with arson convictions with distaste (*n* = 1, 1.7%) and being calm and relaxed around someone with an arson conviction (*n* = 1, 1.7%).

Table 13

Behavioural Attitudes Towards People with Arson Convictions

Category	Definition	Example	Frequency	%
Treat them the same as everyone else.	Treating someone with an arson conviction the same as any other person, or not changing one's behaviour towards people with arson convictions.	"I would try to treat them like I would other people"	25	41.7
Acting with caution.	Acting with caution or being alert around people with arson convictions to protect personal safety.	"I would keep an eye on them for my own safety"	19	31.7
Creating or maintaining physical distance with them.	Generally avoiding coming in close contact or proximity to people with arson convictions.	"Not someone who you would demonise or make a pariah out of, but someone who you would avoid crossing on the street."	11	18.3
Not accepting someone with an arson conviction.	Not being open to or accepting of people with arson convictions.	"I doubt people will be very open and accepting towards them"	8	13.3
Being unwilling to interact socially with people who have arson convictions.	Avoiding social interactions or being unwilling to build interpersonal relationships with people with arson convictions.	"I wouldn't want to be their friend"	7	11.7
Being unwilling to let someone with an arson conviction	Being unwilling to have people with arson convictions near to or inside your home.	"I wouldn't want them around my house!"	5	8.3

near to or into your home.				
Treating people with arson convictions with hostility.	Displaying anger towards people with arson convictions through hostility, aggression or confrontation.	"I would certainly be hostile towards some"	4	6.7
People with arson convictions will be treated with empathy and compassion.	Displaying understanding, empathy and compassion towards people with arson convictions.	"With compassion and no judgment"	3	5.0
Being unwilling to employ someone with an arson conviction.	Being unwilling to employ people with arson convictions.	"I think that people will question people with arson conviction especially with applying for jobs"	3	5.0
Being calm and relaxed around someone with an arson conviction.	Behaving in a calm/relaxed manner around people with arson convictions.	"Very calm and relaxed"	1	1.7
Treating people with arson convictions with distaste	Displaying distaste, verbally or through body language, towards people with arson convictions.	"Judgement, weird looks, comments being made about them"	1	1.7

Note: Percentages add up to more than 100% as participants could report multiple behavioural attitudes

Quantitative Results

People with arson convictions were perceived as being less dangerous in comparison to those with sexual offence convictions (M = 2.2, SD = 1.9) and violence convictions (M = 2.3, SD = 1.7) but slightly more dangerous than those with convictions for criminal damage (M = 3.4, SD = 1.4) and theft (M = 3.8, SD = 1.4) (see Table 14).

Table 14

Quantitative Comparative Perceived Dangerousness of People with Arson Convictions

Conviction Type	n	Mean (SD)	Median	Minimum	Maximum
Sexual offence	60	2.2 (1.9)	2	0	6
Violent offence	59	2.3 (1.7)	2	0	6
Criminal damage	60	3.4 (1.2)	3	0	6
Theft	60	3.8 (1.4)	4	1	6

Summary of Findings

This study aimed to identify the dominant perceptions and attitudes that exist towards people with arson convictions. Findings indicate that people with arson convictions are perceived as being dangerous, mentally ill and likely to reoffend but capable of rehabilitation. Across attitudinal domains, negative evaluations of people with arson convictions were most salient, particularly within cognitive and affective domains where the most prevalent attitudes were exclusively negative (e.g., believing people with arson convictions are emotionally unstable and feeling anger towards them). The most prevalent behavioural attitudes represented positive and negative evaluations, with just under half of all participants wanting to treat people with arson convictions equally and just under a third wanting to act with caution around them. These results indicate that attitudes towards people with arson convictions are largely but not exclusively negative. Further, the quantitative findings indicate that people with arson convictions are compared favourably to people with sexual convictions in regards to dangerousness but are considered more dangerous than people with criminal damage and theft convictions.

While the current study provides novel insight into the dominant negative perceptions and attitudes that exist towards people with arson convictions, it fails to identify to what extent participants endorse these views and if, how, and why these may be similar to or differ from those with sexual convictions. This lack of insight highlights the need for further empirical exploration directly comparing the perceptions, attitudes and underlying mechanisms related to people with arson and sexual convictions. To address this, a second study was conducted to examine similarities and differences in perceptions, attitudes and underlying mechanisms related to both people with arson and sexual convictions.

Method - Study 2

Design

Study 2 employed a mixed-methods between-group design to investigate the similarities and differences in perceptions and attitudes towards people with either arson or sexual convictions. It also sought to explore the psychological mechanisms underpinning negative perceptions and attitudes towards these two groups. A mixed-methods design was chosen as they allow research to capitalise on the advantages of both quantitative and qualitative research methods and offset their individual limitations (Creswell & Creswell, 2017). The mixed-method design used in the present study can be described as a concurrent embedded approach as both quantitative and qualitative data were collected simultaneously to enhance the depth of understanding (Creswell & Creswell, 2017). The quantitative component aimed to determine the effect of conviction type (independent variable) on perceptions and attitudes (dependent variables). The qualitative questions were used to explore concerns underpinning participants' perceptions and attitudes.

Participants

A power analysis was conducted using the pwr package in R to determine the sample size required for one-way analysis of variance tests (Champely et al., 2020). This indicated that a minimum sample size of 150 was needed to identify a medium effect (0.5) with a 0.05 significance value. Attrition rates were expected to be relatively low as previous research suggests that only approximately 11.9% of participants recruited through prolific academic fail to complete an online survey (Peer et al., 2021). Therefore, we aimed to recruit approximately 200 participants to allow for potential attrition.

Participants were recruited through the online crowdsourcing platform Prolific Academic (www.prolific.co). Online crowdsourcing was selected to build on the student sample recruited as part of study 1 and facilitate the recruitment of a more representative community-

based sample to garner a more in-depth understanding of more general community attitudes. Online crowdsourcing provides a relatively cost and time-efficient recruitment method and enhances accessibility to geographically dispersed populations that are more representative than university samples (Braun et al., 2020). Prolific Academic was selected over other crowdsourcing platforms (i.e., MTurk) due to its unique ability to restrict recruitment to an Aotearoa New Zealand sample and the reported high-quality data provided through this platform (Peer et al., 2017; Peer et al., 2021). Prolific Academic has also been demonstrated to be suitable for research studying sensitive and highly stigmatised topics (Ó Ciardha et al., 2021).

The present study was only made available to adult Prolific Academic users (over 18 years of age) who registered their current residence as Aotearoa New Zealand. Two hundred and three people accessed the survey, of which 200 successfully completed the survey. No responses demonstrated noticeable long string responding patterns to indicate careless responding (Brühlmann et al., 2020; DeSimone et al., 2014). Two participants were excluded for providing responses under 100 seconds (< 2 seconds per question) and failing to complete measures beyond the demographic questions (DeSimone et al., 2014). This resulted in a final sample of 198 participants with 99 participants in each condition.

Approximately half of the sample identified as female (*n* = 108, 54.5%). Seventy-two participants reported being between the ages of 20-29 years (36.4%) and 57 (28.8%) between 30-39 years. The majority of participants identified as New Zealand Pākehā (*n* = 126, 63.6%) and 16% (*n* = 32) of participants reported identifying with multiple ethnicities. The sample had a relatively high level of education, with 77 (38.9%) participants holding a Bachelor's degree. The most common occupation selected from the predefined list was other professional (*n*= 80, 40.4%) followed by student (*n* = 36, 18.2%). One hundred and twelve participants (56.6%) reported that they personally knew someone with a criminal conviction.

The majority of participants did not currently own private property (*n* = 124, 62.6%), and of those who did, the majority were not currently renting this property to others (*n* = 62, 83.8% of those who owned their property). See Table 15 for a full overvie of demographic details collected.

Table 15

Demographic Composition Study 2 Sample (N = 198)

Demographic Characteristic	Frequency	%
Age		
20-29	72	36.4
30-39	57	28.8
40-49	32	16.2
50-59	15	7.6
18-19	14	7.1
60-64	4	2.0
65+	4	2.0
Gender		
Female	108	54.5
Male	89	44.9
Other	1	0.5
Ethnicity		
New Zealand Pākehā	126	63.6
Chinese	22	11.1
Other Asian	21	10.6
Māori	19	9.60
Other European	18	9.09
Indian	8	4.0
Other	8	4.0
Samoan	3	1.5
African	2	1.0
Cook Islands Maori	1	0.5
Latin American	1	0.5
Missing	1	0.5
Occupation		
Other professional	80	40.4
Student	36	18.2
Education	18	9.1
Administration/Sales	16	8.1
Hospitality or Tourism	13	6.6
Beneficiary (public assistance)	12	6.1
Tradesperson/services	12	6.1
Health	6	3.0
Missing	5	2.5

Education		
Bachelor's degree	77	39
Tertiary (post-school) certificate or diploma	29	14.6
Bursary/University Entrance/NCEA Level 3	28	14.1
Master's or Doctoral degree	26	13.1
Bachelor's degree with Honours	20	10.1
Sixth Form Certificate/ NCEA Level 2	11	5.6
School Certificate/NCEA Level 1	5	2.5
Form 3 or 4/Year 9 or 10	1	0.5
Missing	1	0.5
Property owner		
No	124	62.6
Yes	74	37.4
Rent property to others		
No	62	31.3
Yes	9	4.5
Know someone with a criminal conviction		
No	112	56.6
Yes	81	40.9
Prefer not to say	5	2.5

Note: The percentage of participants across ethnicities adds up to more than 100% as participants could select more than one ethnic identity.

Measures

The mixed-method survey was designed and administered via Qualtrics. The survey was comprised of six sections, each presented on a separate page. The first two pages of the survey presented questions related to demographic information and socially desirable responding. The remaining four pages were presented in a randomised order and consisted of questions assessing perceptions, cognitive attitudes, affective attitudes, and behavioural attitudes.

Demographic questions

Demographic details collected in Study 2 were consistent with those collected in Study 1 (see Appendix A). The demographic question regarding property ownership required a minor wording and display amendment as findings from Study 1 indicated several participants may have misunderstood the question.

Balanced Inventory of Desirable Responding, Impression Management Sub-scale (Paulhus, 1984, 1991)

The Balanced Inventory of Desirable Responding (BIDR; Version 6) was developed by Paulhus (1984, 1991) to assess socially desirable responding. This scale comprises 40 items equally divided between two subscales; Self-Deceptive Enhancement (SDE) and Impression Management (IM). The SDE subscale aims to measure ones' tendency for positively biased self-deception (e.g., *I am a completely rational person*), and the IM subscale aims to measure ones' propensity to positively inflate one's self-description to an audience (e.g., *I sometimes tell lies if I have to*) (Paulhus, 1984, 1991). The present study only used the IM scale to measure desirable responding. Measuring socially desirable responding was considered to be of particular importance in the present study as attitudes towards people with deviant sexual interests have been identified as being sensitive to social desirability (Jahnke et al., 2015)

The IM subscale consists of 20 items rated on a 7-point Likert scale ranging from 1 (not true) to 7 (very true). Reverse coding is applied to 10 items so that higher scores reflect more socially desirable responding. To calculate total scale scores, Paulhus (1991) recommends dichotomous scoring, which only recognises extreme responses of 6 or 7, assigning one point for either response. Thus, potential total IM scores can range from 0 to 20. Paulhus (1988) reports good to excellent internal consistency for the IM subscale (Cronbach's α range from .75 to .86). The Cronbach's alpha for this study was $\alpha = 0.79$ indicating good internal consistency.

Perceptions and Attitudes

There are no existing measures designed to measure attitudes and perceptions towards people with arson convictions. Therefore, items assessing different perceptions and attitudinal components were either selected from the wider literature on public attitudes towards

offending or developed specifically for the current study. The findings from Study 1 were used to inform the identification and development of questions that would appropriately assess perceptions and attitudes towards both individuals with arson and individuals with sexual convictions. Perceptions and attitudes reported by at least 15% of the sample were considered for inclusion in Study 2. In addition, perceptions and attitudes that were less prevalent but had significant relevance within both the arson and sexual offending literature were also considered for inclusion (e.g., substance abuse, social isolation, community monitoring).

To develop items that could appropriately assess both attitudes towards individuals with arson and sexual offending, the literature on attitudes towards sexual offending was first consulted to determine if there were existing items assessing the selected perceptions and attitudes that could be adapted for the present study or if new questions needed to be developed. To be consistent with existing research assessing public perceptions and attitudes, most questions selected comprised proposition-based statements and scored on Likert scales. Person-first language was used instead of offence-centred labels across all survey items to limit negative labelling effects (Imhoff, 2015; Lowe & Willis, 2019; Lowe & Willis, 2021; Malinen et al., 2014).

Measures Examining Perceptions. Sixteen perceptions reported in Study 1 were included in Study 2. These were broadly grouped into three domains: reoffence risk, characteristics, and sentencing/treatment needs.

Reoffence risk consisted of the perceptions that people with arson convictions are likely to reoffend. This perception was measured by adapting the estimated reoffence scale by Willis et al. (2013). Participants were asked to estimate the percentage of people with arson or sexual convictions who reoffend using a sliding scale ranging from 0 to 100%.

Perceptions related to characteristics of people with arson convictions that met the inclusion criteria included: they are mentally ill, addicted to fire, have difficult lives, tend to be young, are dangerous and are not dangerous. There were also a number of prevalent offence specific perceptions about the deliberate nature and motivations for fire-setting (e.g., insurance fraud). As these perceptions were not easily comparable for individuals with sexual convictions, these were excluded. Perceptions of dangerousness were represented by a single item adapted from an existing measure, asking participants to rate how strongly they agreed or disagreed with the statement: *Only a few people with arson/sexual offence convictions are dangerous* (Church et al., 2007). Two additional perceived characteristics which did not meet the 15% cut-off were included: the perceptions that people with arson convictions are socially isolated and experience substance abuse problems since these reflect characteristics of people with arson histories that are commonly reported in the literature (Dickens et al., 2009; Doley et al., 2011; Field, 2016). This resulted in a total of eight perceived characteristics included within the survey. Appropriate existing questions from the sexual offending literature were identified for seven of these perceptions where only the offence type needed to be adjusted for each condition.

Perceptions related to sentencing and treatment needs that met the inclusion criteria included: people with arson convictions can/should be rehabilitated, need psychological interventions/support, should be imprisoned or sent to prison/jail, should provide reparations for their crime. An additional perceived sentencing need that did not meet the 15% cut-off was included due to its prevalence in the academic literature: people with arson convictions should be monitored/supervised in the community (Doley et al., 2011; Field, 2016; National Conference of State Legislatures, 2019; Sambrooks et al., 2021). This resulted in a total of four perceived sentencing and treatment needs included in the survey. Although existing measures in the sexual offending literature related to sentencing and treatment needs were

identified, none were appropriate for the present study due to them often forming evaluative opinion-based beliefs rather than perceptions (e.g., *Sex offenders should be forced to undergo therapy*; Imhoff, 2015) or focused on precise perceptions of treatment efficacy and sentence length (e.g., *How many years do you believe that sex offenders should serve in prison?;* Levenson et al., 2007) (See Appendix C for an example of how existing measures were evaluated). Therefore, new items were developed for all perceived sentencing and treatment needs (see Table 16). With the exception of the estimated reoffence risk, all perception items were scored on a 5-point Likert scale ranging from 0 (Strongly disagree) to 4 (Strongly agree).

Table 16

Quantitative Items Assessing Perceptions

Order	Perception category	Question: Please rate how much you agree or disagree with the following statements.	Source
1	Reoffence risk	Estimate the percent of people with arson/sexual offence convictions who go on to reoffend.	Risk of reoffending scale (Willis et al., 2013)
2	Characteristics	Most people with arson/sexual offence convictions commit arson/sexual offences because they are mentally ill.	Public perceptions toward the cause of sex offending items (Call, 2019)
3		A person with an arson/sexual offence conviction is addicted to fire/sex.	Implicit theories of paedophilic personality traits scale (McCartan, 2010)
4		Most people with arson/sexual offence convictions are adolescents.	N/A
5		People with arson/sexual offence convictions have difficult lives.[a]	N/A
6		Only a few people with arson/sexual offence convictions are dangerous.[b]	Community attitudes towards sex offenders scale (Church et al., 2007)
7		People with arson/sexual offence convictions cannot be successfully rehabilitated.	Attitudes toward Sex Offenders Survey (Olver & Barlow, 2010)
8		Most people with arson/sexual offence convictions do not have close friends.	Community attitudes towards sex offenders scale (Church et al., 2007)
9		Alcohol and drugs play a moderate or major role in arson/sexual offending.	Perceptions About Sex Offenders and Sex Crimes scale (Levenson et al., 2007)
10	Sentencing & Treatment	People with arson/sexual offence convictions should receive a prison sentence.	N/A
11		People with arson/sexual offence convictions should receive therapy.	N/A
12		People with arson/sexual offence convictions should be monitored.	N/A
13		People with arson/sexual offence convictions should provide reparations for their offence.	N/A

Note: N/A is cited for original questions.

[a] Question 5 was excluded from the survey by error.

[b] Question 6 was reverse coded.

Measures Examining Cognitive Attitudes. The most prevalent cognitive attitudes identified in Study 1 included: people with arson convictions are emotionally unstable, untrustworthy, lack intellectual abilities, mentally unstable and behaviourally unstable.

Appropriate existing questions used in the sexual offending literature were identified and adapted to represent each of these cognitive attitudes (see Table 17). Again, only minor adaptations relating to person-first language and offence-type were necessary. A number of these items were also selected from the Intent Subscale of the Attitudes Towards Sexual Offenders Scale-21 (ATS-21) (Hogue & Harper, 2019), which is described below.

Intent Subscale - Attitudes Towards Sexual Offenders Scale-21 (Hogue & Harper, 2019). The intent subscale represents one of three subscales comprising the ATS-21. The ATS-21 is a refined and shortened version of the original Attitudes Towards Sexual Offenders Scale (Hogue, 1993; Hogue & Harper, 2019), which is a self-report measure designed to measure community attitudes towards individuals who have sexually offended. The ATS-21 has a three-factor structure which reflects the three attitudinal domains (*Factor 1: Trust* for affective attitudes, *Factor 2: Intent* for cognitive attitudes, and *Factor 3: Social distance* for behavioural attitudes). The Intent subscale comprises seven items scored on a 5-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree) (Hogue & Harper, 2019). All items comprising the intent subscale are reverse coded so that higher scores are indicative of more positive cognitive attitudes. Total scores are calculated by summing item scores and subtracting a constant of seven. Therefore, potential total scores range from 0-28. Hogue and Harper (2019) reports excellent internal consistency for the ATS-21 ($\alpha = .91$) and excellent internal consistency for the Intent subscale ($\alpha = .84$).

For consistency, the cognitive attitude items included in addition to the Intent Subscale were rated on the same 5-point Likert scale and followed the same scoring procedure. See Table 17 below for a full outline of cognitive attitude items.

Table 17

Quantitative Items Assessing Cognitive Attitudes

Order	Question: Please rate how much you agree or disagree with the following statements.	Source
1	Give someone with an arson/sexual offence conviction an inch and they take a mile.	
2	Trying to rehabilitate someone with an arson/sexual offence conviction is a waste of time and money.	
3	People with arson/sexual offence convictions only think about themselves.	
4	Most people with arson/sexual offence convictions are too lazy to earn an honest living.	ATS-21; Intent subscale (Hogue & Harper, 2019)
5	People with arson/sexual offence convictions are just plain mean at heart.	
6	People with arson/sexual offence convictions are always trying to get something out of somebody.	
7	People with arson/sexual offence convictions respect only brute force.	
8	People with arson/sexual offence convictions are very emotional.	Implicit theories of paedophilic personality traits scale (McCartan, 2010)
9	People with arson/sexual offence convictions cannot control their impulses.	Attitudes toward sex offenders survey (Olver & Barlow, 2010)
10	People with arson/sexual offence convictions are mentally unstable.	Defendant mental instability item (Borhart & Plumm, 2015)
11	It is not wise to trust a person with an arson/sexual offence conviction.	ATS-21(Hogue & Harper, 2019)
12	People with arson/sexual offence convictions generally have a lower level of IQ compared with the rest of the population.	Knowledge and myths about child sexual offenders scale (Wurtele, 2018)

Measures Examining Affective Attitudes. The most prevalent affective attitudes reported in Study 1 include anger, worry/anxiety, general sadness, pity, and confusion. To represent these prevalent affective attitudes we adapted Jahnke and Imhoff's (2015) affective reaction items, which have previously been used to assess fear, anger and pity towards people with paraphilias (Lehmann et al., 2020). The three original items (fear, anger and pity) were also included resulting in a total of six items assessing affective attitudes (see Table 18). Items were rated on a 7-point Likert scale ranging from 0 (Strongly disagree) to 6 (Strongly

agree) and were reverse coded so that higher scores reflected more positive affective attitudes.

General Feeling Scale (Willis et al., 2013). To provide greater context to the understanding of affective attitudes, we also assessed the general valence and intensity of affective attitudes using the General Feeling Scale (Willis et al., 2013). This item requested participants to indicate how they generally felt about people with either arson or sexual offence convictions on a 7-point Likert scale ranging from 1 (Very negative) to 7 (Very positive).

Table 18

Quantitative Items Assessing Affective Attitudes

Order	Question: Please rate on the scale provided how you generally feel about people with arson convictions.	Source
1	How do you generally feel about people with arson/sexual offence convictions?	General Feeling Scale (Willis et al., 2013)
Order	Question: Please rate on the scale provided how much you agree or disagree with the following statements.	Source
2	When I think of people with arson/sexual offence convictions I feel fear.	Affective Reaction Items (Jahnke et al., 2015)
3	When I think of people with arson/sexual offence convictions I feel anger.	
4	When I think of people with arson/sexual offence convictions I feel pity.	
5	When I think of people with arson/sexual offence convictions I feel worried.	
6	When I think of people with arson/sexual offence convictions I feel upset.	
7	When I think of people with arson/sexual offence convictions I feel confused.	

Measures Examining Behavioural Attitudes. The most prevalent behavioural attitudes identified in Study 1 consist of: treat them the same as everyone else, acting with caution and creating or maintaining physical distance with people who have arson convictions. An existing item used in the sexual offending literature was identified to represent the behavioural attitude of acting with caution, and new items were developed to

represent the remaining two behavioural attitudes (see Table 19). These three items were integrated within the social distance scale (detailed below) to provide a more comprehensive measure of behavioural attitudes.

Social Distance Scale (Willis et al., 2013). Willis et al. (2013) drew upon previous research by Bogardus (1925) to develop a scale measuring social distance and anticipatory behaviours towards people who have sexually offended. This scale comprises 11 items; the first eight items ask respondents to rate whether or not they would accept a sex offender released from prison as their neighbour, colleague, boss, acquaintance, member of church/sports club/community group, close friend, a partner in marriage/civil union and son/daughter-in-law. The final three items ask respondents to rate their willingness to employ, rent a house to, or introduce to their social group an individual who has sexually offended. All items are rated on a 5-point Likert scale ranging from 1 (Most definitely not) to 5 (Most definitely). Willis et al. (2013) reported excellent internal consistency for the Social Distance scale ($\alpha = .93$), as did Malinen et al. (2014) ($\alpha = .95$). (Hogue, 1993)

Table 19

Quantitative Items Assessing Behavioural Attitudes

Order	Question: Please rate whether or not you would accept someone with an arson/sexual offence conviction as:	Source
1	Your neighbour.	Social distance scale (Willis et al., 2013)
2	A colleague at work.	
3	Your boss.	
4	An acquaintance.	
5	A member in you church/sports club/community group.	
6	A close friend.	
7	A partner in marriage/civil union.	
8	A son/daughter in law.	
Order	Question: Please rate whether or not you would be willing to:	Source
9	Employ someone with an arson/sexual offence conviction.	Social distance scale (Willis et al., 2013)
10	Accept onto an educational course someone with an arson/sexual offence conviction.	
11	Rent a house/apartment to someone with an arson/sexual offence conviction.	
12	Treat someone with an arson/sexual offence conviction the same as everyone else.	N/A
13	Be constantly on guard around people with arson/sexual offence convictions.	ATS-21 (Hogue, 1993); (Hogue & Harper, 2019)
14	Stay away from people with arson/ sexual offence convictions.	N/A

Note: N/A is cited for original questions.

Qualitative Open-ended Questions

Four open-ended qualitative questions were developed to prompt participants to explain their perceptions and attitudes as a way of further identifying the underlying psychological mechanisms or concerns associated with these (see Table 20). Questions were designed to be broad to avoid the influence of demand characteristics and priming effects that can occur with more focused and closed questions (Braun et al., 2020). All questions were piloted on a group of twelve forensic psychology Master's students, and refinements were made to the wording based on feedback provided. Within the survey, each open-ended question was positioned below the series of quantitative measures it directly corresponded to

(e.g., the behavioural attitude open-ended question was presented below the social distance scale).

Table 20

Open-Ended Questions Employed in Study 2 Survey

Perception or Attitudinal Component	Open-Ended Question
Perceptions	Please briefly explain why you have these perceptions of people with arson/sexual offence convictions.
Cognitive Attitudes	Please briefly explain why you have these opinions of people with arson/sexual offence convictions.
Affective Attitudes	Please briefly explain why you feel these emotions towards people with arson/sexual offence convictions.
Behavioural Attitudes	Please briefly explain why you would behave this way towards people with arson/sexual offence convictions.

Procedure

The research was approved by the Victoria University Wellington Human ethics committee on 20th July 2021 (Application ID: 0000028731). An advertisement for the survey was posted on Prolific Academic on 23rd July 2021. Prospective participants were provided with a confidential survey link that redirected them to the Qualtrics Survey. The first pages presented to participants consisted of the information sheet and the consent form. Provided that informed consent was given, participants completed the demographic questions followed by the IM subscale (Paulhus, 1991). Participants were then randomly allocated to either the arson or sexual conviction condition. Within each condition, participants completed the measures assessing perceptions, cognitive attitudes, affective attitudes and behavioural attitudes towards the group in question, which were presented on four separate pages and presented in a randomised order (see Appendix D). The final page of the survey provided the debrief sheet, outlining the purpose and design of the study in more detail. Upon completion,

participants were automatically redirected to Prolific academic and received payment of $2 directly into their Prolific account within one week of their participation. Data collection was completed on 25th July 2021.

Results - Study 2

Missing Data

There was a total of nine missing data points, five in the arson conviction condition and four in the sexual conviction condition. With the exceptions of the estimated reoffending scale, which was missing three responses in the arson conviction condition, no item was missing more than two responses in either condition. Due to the small quantity of missing data and the integration of novel individual items into existing scales, pro-rating was determined to be inappropriate and thus was not employed to calculate total scale scores where item-level missing data was present. Missing data were therefore excluded listwise in subsequent analysis.

Preliminary Analysis

As the present study adapted and integrated new items into several existing measures, preliminary analysis was conducted to assess the internal consistency of items measuring perceptions and each attitudinal domain to determine if they could be combined as overall scale measures for analysis, or whether each item should be treated as a separate dependent variable. To do this, Cronbach's alpha was calculated for the collective items comprising each perception and attitudinal domain. Items measuring the same underlying condition should be correlated with each other and thus demonstrate at least acceptable internal consistency. In order to ensure measures demonstrated acceptable internal consistency when applied to both people with arson and sexual convictions, alphas were calculated for each condition individually as well as for the full sample (see Table 21). Alpha's were interpreted using George and Mallery (2003) criteria outlining values >.9 are excellent, >.8 good, >.7 acceptable, >.6 questionable, >.5 poor and <.5 unacceptable. Exclusion of items was considered if deleting the item would increase Cronbach's alpha, and the item was poorly correlated (<.3) to other items comprising the measure (Field, 2013). Additionally, inter-item

correlation matrixes were reviewed for each measure within each condition, and no multicollinearity issues were identified (r >.9) (Field, 2013). This approach is consistent with previous research by Lehmann et al. (2020), Malinen et al. (2014) and Willis et al. (2013).

The six items developed to assess perceptions of characteristics showed poor internal consistency (α = .46), as did the four items assessing perceptions of sentencing/ treatment needs (α = .55). In both cases, eliminating any item would not increase the alpha to an acceptable level. Therefore, these items were treated as individual dependent variables within the quantitative analyses.

The twelve items assessing cognitive attitudes showed good internal consistency (α =.83). However, two items were excluded as they were poorly correlated with other items and excluding these items increased the Cronbach's alpha across the total sample (α = .86) and within each condition (arson conviction α = .88; sexual conviction α = .84). These excluded items are; *people with arson/sexual offence convictions are very emotional,* and *people with arson/sexual offence convictions cannot control their impulses.* The remaining ten cognitive attitude items were summed to create a total score and treated as a single dependent variable within the analyses.

The six items assessing affective attitudes showed questionable internal consistency (α = .68). However, the item assessing pity was poorly correlated with other items and excluding this item increased the Cronbach's alpha to an acceptable level across the total sample (α = .77) and within each condition (arson conviction α = .76; sexual conviction α = .74). The remaining five affective attitude items were combined and treated as a single dependent within the quantitative analyses.

The fourteen items assessing behavioural attitudes showed excellent internal consistency (α = .93). This level of internal consistency is comparable to that reported for the

social distance scale (Willis et al., 2013). Therefore, all behavioural attitude items were combined and treated as a single dependent variable within the quantitative analyses.

Impression Management

Bivariate correlations were computed to determine if socially desirable responding (IM total scores) was significantly related to any dependent variables. One item was significantly correlated to IM in each condition. As these significant correlations were only identified at an item-level, this indicates that social desirability did not have a large influence on our results, and therefore IM was not included as a control variable in subsequent analyses.

Table 21

Cronbach's Alpha Coefficient Values for Each Measure, Split by Condition

Measure	Arson Conviction Condition	Sexual Conviction Condition	Total sample
Perceptions: Characteristics	.46	.29	.47
Perceptions: Sentencing and Treatment	.53	.55	.55
Cognitive Attitudes	.88	.84	.86
Affective Attitudes	.76	.74	.77
Behavioural Attitudes	.93	.90	.93

Main Analyses

Descriptive Statistics

Table 22 outlines items assessing perceptions of characteristics, sentencing, and treatment needs, including means, standard deviations and the frequency of responses across each scale point (4 Strongly agree - 0 Strongly disagree).

Table 22

Mean, SDs and Frequency of Agreement (%) for Items Assessing Perceptions, Split by Condition (N = 199)

Item	Arson Conviction Condition						Sexual Conviction Condition					
	M (SD)	4 Strongly agree	3	2	1	0 Strongly disagree	*M* (SD)	4 Strongly agree	3	2	1	0 Strongly disagree
Most people with arson/sexual offence convictions commit arson/sexual offences because they are mentally ill.	2.28 (.94)	7.1	37.4	35.4	17.2	3.0	1.88 (1.06)	5.1	28.3	23.2	36.4	7.1
A person with arson/sexual offence convictions is addicted to fire/sex.	2.05 (1.1)	7.1	32.3	27.3	25.3	8.1	1.77 (1.2)	9.1	18.2	24.2	37.4	11.1
Most arson/sexual offences are committed by adolescents.	1.99 (.97)	4.0	28.3	36.4	25.3	6.1	1.20 (.83)	1.0	5.1	25.3	50.5	18.2
Only a few people with arson/sexual offence convictions are dangerous.	2.05 (.96)	4.0	33.3	27.3	32.3	2.0	1.36 (1.02)	2.0	14.1	21.2	43.4	19.2
People with an arson/sexual offence convictions cannot be successfully rehabilitated.	1.12 (.91)	2.0	4.0	23.2	45.5	25.3	1.38 (.84)	1.0	9.1	28.3	50.5	11.1
Most people with arson/sexual offence convictions do not have close friends.	1.43 (.82)	0	7.1	43.4	35.4	14.1	1.43 (.96)	2.0	12.1	28.3	42.4	15.2
Alcohol and drugs play a major role in arson/sexual offending.	2.24 (.92)	6.1	33.3	44.4	11.1	5.1	2.35 (.10)	11.1	37.4	30.3	18.2	3.0

People with arson/sexual offence convictions should receive a prison sentence.	2.61 (.91)	15.2	43.4	29.3	11.1	1.0	3.06 (.83)	33.3	45.5	14.1	5.1	1.0
People with arson/sexual offence convictions should receive therapy.	3.24 (.73)	39.4	47.5	11.1	2.0	0	3.42 (.82)	57.6	32.3	6.1	3.0	1.0
People with arson/sexual offence convictions should be monitored within the community.	2.58 (.83)	13.1	39.4	40.4	6.1	1.0	3.18 (.81)	37.4	48.5	10.1	3.0	1.0
People with arson/sexual offence convictions should provide reparations for their offence (e.g., monetary fine, community service).	3.11 (.77)	31.3	51.5	15.2	1.0	1.0	2.99 (.92)	31.3	45.5	15.2	7.1	1.0

Table 23 outlines the mean, standard deviation, median, possible and obtained ranges for the estimated reoffending scale and each of the four attitudinal measures (see Appendix E for item-level descriptive statistics for cognitive, affective and behavioural attitude scales)

Table 23

Mean, SDs, Medians and Ranges for Scale Measures, Split by Condition

Scale	Arson Conviction Condition					Sexual Conviction Condition				
	n	*M* (SD)	*Md*	Obtained Range	Possible Range	n	*M* (SD)	*Md*	Obtained Range	Possible Range
Estimated Reoffending Scale	96	44.14 (22.41)	43.5	1 - 100	0 - 100	98	59.29 (21.30)	61	10 - 100	0 - 100
Cognitive Attitudes	97	23.89 (6.17)	23	0 - 37	0 - 48	97	20.93 (6.15)	20	5 - 34	0 - 48
General Feeling Scale	99	2.98 (1.03)	3	1 - 6	1 - 7	99	1.87 (.83)	2	1 - 4	1 - 7
Affective Attitudes	99	14.99 (5.31)	15	4 – 29	0 - 30	99	10.91 (5.29)	10	0 - 24	0 - 30
Behavioural Attitudes	99	41.10 (11.44)	41	14 - 70	14 - 70	98	31.20 (9.60)	31	14 - 61	14 - 70

Comparisons of Perceptions and Attitudes Towards People with Arson and Sexual Convictions

The assumptions for independent samples t-test were tested to determine if there were issues with normality and homogeneity of variance. The Shapiro-Wilk test and tests of skew and kurtosis suggested that data for the majority of scales were not normally distributed. Therefore, Mann Whitney U-tests were used to examine differences in perceptions and attitudes between the two groups as this test does not require normally distributed data (Field, 2013). Due to the number of tests required, a Bonferroni correction was employed, adjusting the alpha level to .0033, to control for potential Type 1 errors due to alpha inflation from multiple comparisons (Field, 2013). The asymptotic significance value is reported for all tests due to the sufficiently large sample size (Field, 2013).

Perceptions. A series of ten Mann-Whitney U tests were performed with the remaining perception items. Mann-Whitney U tests indicated that participants estimated significantly higher reoffence rates for people with sexual convictions compared to those with

arson convictions (U = 2887, z = -4.66, p < .001, r = -.33). People with arson convictions were significantly more likely to be perceived as being mentally ill (U = 5978.5, z = 2.79, p = .01, r = .20), adolescents (U = 7095, z = 5.71, p < .001, r = .41), and not all dangerous (U = 6634.5, z = 4.66, p < .001, r = .33) compared to people with sexual convictions.

People with sexual convictions were significantly more likely to perceived as being untreatable (U = 4053.5, z = -2.26, p = < .02, r = -.16), requiring prison sentences (U = 3466, z = -3.68, p < .001, r = -.26), requiring therapy (U = 4053.5, z = -2.32, p = .02, r = -.16), and requiring monitoring within the community (U = 2904, z = -5.27, p < .001, r = -.37) compared to people with arson convictions. Effect sizes across all significant findings were small (r = .1 to .3) to medium (r = .3 to .5) (Cohen, 1988). There were no significant differences on public perceptions of people with arson or sexual convictions on the items relating to their lack of close friends, the role of alcohol/drugs in their offending and the need for reparations (see Table 24).

One item assessing perceived characteristics was not included in between-group analysis due to the variation in item wording across conditions (*Q3. A person with an arson/sexual conviction is addicted to fire/sex*). Based on mean scores, participants were more likely to perceive people with arson convictions as being addicted to fire (M = 2.05, SD = 1.1) compared to people with sexual convictions being addicted to sex (M = 1.75, SD = 1.2).

Table 24

Comparison of Perceptions Towards People with Arson Convictions vs. Sexual Convictions (Mann-Whitney U)

Item	N	Mann-Whitney U	Standardised test statistic (*z*)	Asymptotic Sig (2-sided test) (*p*)	Effect size (*r*)
What percent of people with arson/sexual offence convictions do you believe reoffend?	194	2887	-4.66	< .001	-.33
Most people with arson/sexual offence convictions commit sexual offences because they are mentally ill.	198	5978.5	2.79	.01	.20
Most arson/sexual offences are committed by adolescents.	198	7095	5.71	< .001	.41
Only a few people with arson/sexual offence convictions are dangerous.	197	6634.5	4.66	< .001	.33
People with arson/sexual offence convictions cannot be successfully rehabilitated.	198	4053.5	-2.26	.02	-.16
Most people with arson/sexual offence convictions do not have close friends.	198	5055	.41	.69	.03
Alcohol and drugs play a major role in arson/sexual offending.	198	4578	-.84	.40	-.06
People with arson/sexual offence convictions should receive a prison sentence.	197	3466	-3.68	< .001	-.26
People with arson/sexual offence convictions should receive therapy.	198	4053.5	-2.32	.02	-.16
People with arson/sexual offence convictions should be monitored within the community.	198	2904	-5.27	< .001	-.37
People with arson/sexual offence convictions should provide reparations for their offence (e.g., monetary fine, community service).	198	5146.5	.66	.51	.05

Cognitive, Affective, and Behavioural Attitudes. In relation to attitudes, participants held significantly more positive attitudes towards people with arson convictions relative to people with sexual convictions on the domains of cognitive attitudes ($U = 5975$, $z = 3.25$, $p = .001$, $r = .23$), the general feelings scale ($U = 7734$, $z = 7.31$, $p < .001$, $r = .52$),

affective attitudes (U = 7033, z = 5.30, p< .001, r = .38), and behavioural attitudes (U = 7206.5, z = 5.89, p < .001, r = .41). All effect sizes ranged from small (r = .1 to .3) to medium (r = .3 to .5) with the exception of the general feelings scale where a large effect size was detected (r > .5) (Cohen, 1988) (see Table 25).

Table 25

Comparison of Attitudes Towards People with Arson Convictions vs. Sexual Convictions (Mann-Whitney U)

Scale	N	Mann-Whitney U	Standardised test statistic *z*	Asymptotic Sig (2-sided test) *p*	Effect size r
Cognitive Attitudes	194	5975	3.25	.001	.23
General Feeling Scale	198	7734	7.31	< .001	.52
Affective Attitudes	198	7033	5.30	< .001	.38
Behavioural attitudes	197	7206.5	5.89	< .001	.42

Qualitative Results

Planned Qualitative Analysis

Summative content analysis (Hsieh & Shannon, 2005) was used to analyse open-ended questions to identify participants' underlying concerns about people with either arson or sexual convictions and their reintegration into society. An inductive approach and critical realist ontological perspective was employed to ensure that participants' responses entirely guided the identification of concerns about people with arson and people with sexual convictions (Potter & Levine-Donnerstein, 1999). Open-ended responses were analysed separately for the arson and sexual conviction conditions so comparisons could be made. Although it was originally intended that each of the four questions would be analysed separately to identify psychological mechanisms underlying perceptions, cognitive attitudes, affective attitudes and behavioural attitudes, participants tended to provide more general reasonings underpinning their negative or positive evaluations rather than explanations

specific to each attitudinal component. Therefore, responses across all four questions were analysed together.

Analysis followed the same five steps as outlined in Study 1. However, unlike Study 1, the primary researcher reviewed each participants' quantitative survey data alongside their open-ended responses to provide additional context and facilitate interpretation. The average word count across participants' responses to open-ended questions was 119.75 words (*SD* = 79.73) in the arson conviction condition and 127.11 words (*SD* = 116.56) in the sexual conviction condition.

Inter-rater reliability was assessed for both codebooks as a measure of reproducibility. Two secondary coders were selected who had not been involved in developing the coding framework and had limited knowledge of the existing literature related to the research project (Stemler, 2001). The use of two secondary coders, as opposed to one, allowed for a more time-effective assessment of inter-rater reliability and prevented potential human error from confusing the two codebooks.

The arson conviction codebook was assessed by the same secondary coder as in Study 1, and the sexual conviction codebook was coded by a second researcher who had no prior knowledge of the research. The primary researcher trained both secondary coders in how to use their respective codebooks and provided them with five transcripts to practice implementing the coding protocols. Following this, secondary coders were provided with ten randomly selected transcripts, which equates to 10% of data within each condition, to code independently from the primary researcher.

The arson codebook was rated first; however, through this process, it was identified that some categories required more explicit definitions to ensure mutually exclusive coding. Therefore, refinements were made to both codebooks before inter-rater reliability was assessed for coding across both conditions. A substantial level of agreement was obtained for

both codebooks (Landis & Koch, 1977). The total percent agreement achieved for the arson conviction codebook was 78.6%, resulting in a kappa value of $k = 0.76$. The sexual conviction codebook achieved an overall per cent agreement of 75.8%, resulting in a kappa value of $k = 0.73$.

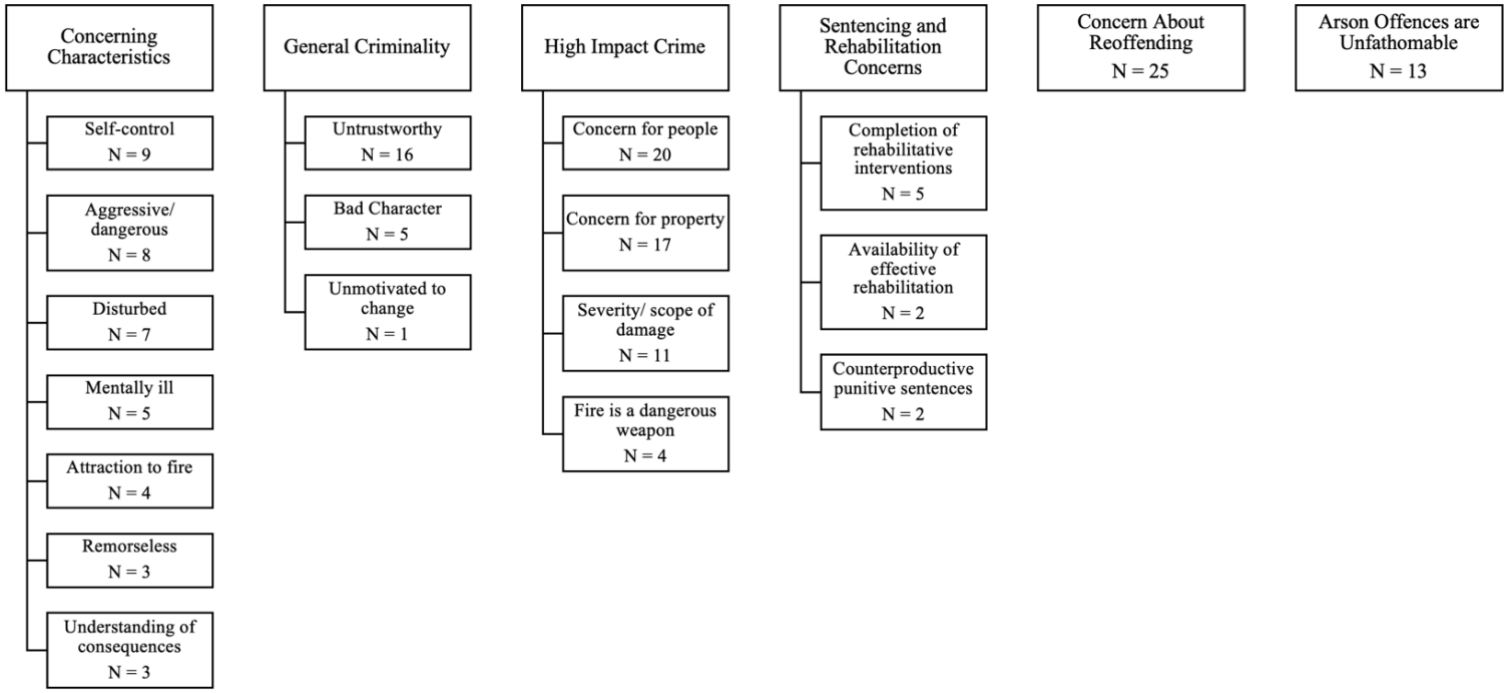
Concerns About People with Arson Convictions

Ninety-six participants in the arson conviction responded to at least one open-ended question. Of those who responded, 20 (20.8%) did not provide responses relevant to the research question, so these were not included in the analysis. This resulted in a final sample of 76 participants for the qualitative strand of the study.

Summative content analysis identified 19 distinct concerns that were held by participants about people with arson convictions and their reintegration into society. These concerns were organised into six overarching categories: (1) concerning characteristics, (2) general criminality, (3) high impact crime, (4) sentencing and rehabilitation concerns, (5) concern about reoffending, and (6) arson offences are unfathomable. See Figure 1 for a visual representation of each overarching category and their comprising subcategories. Each of these categories will now be discussed including supporting quotes.

Figure 1

Thematic Map of Concerns about People with Arson Convictions (n = 76)



Concerning Characteristics. This category describes participants' concerns that people with arson convictions possess specific negative attributes. The most common characteristic of concern was that people with arson convictions lack self-control in that their behaviours or emotions change rapidly, unexpectedly or with little control (*n* = 9, 11.8%). This concern often underpinned feelings of fear and a desire to act cautiously around or avoid people with arson convictions.

> *"They are highly emotionally volatile people who should be treated with caution and care"* (Participant 75)

Eight participants (10.5%) reported being concerned that people with arson convictions were aggressive and dangerous individuals ready to engage in violence. This concern also underpinned feelings of fear and the desire to act cautiously around people arson convictions to avoid conflict.

"I am likely to be cautious around someone with an arson conviction as they might be violent" (Participant 65)

Seven participants (9.2%) reported being concerned that people with arson convictions were disturbed, defined here as having unnatural and deeply upsetting thoughts or habits. This concern often reflected the perception that people with arson convictions get enjoyment from causing harm or destruction through their crimes. As a result of this, participants expressed feelings of anger and fear towards people with arson convictions.

"Someone who just likes to set people's house on fire for their own sick entertainment, I would feel anger and fear for them" (Participant 91)

Five participants (6.6%) reported concerns about people with arson convictions being mentally ill. This does not include responses related to empathetic concern for the mental wellbeing of people with arson convictions but instead includes negative cognitive attitudes that because of mental illness, people with arson convictions are a threat and should be avoided or treated with caution.

"I also know another person that has an arson conviction that I am on guard with because of their mental health issues" (Participant 16)

Four participants reported concern about an attraction to fire and/or fire-setting (n = 4, 5.3%), which was associated with the belief that people with arson convictions do not have control over their behaviour and will inevitably reoffend.

"My first image of an arsonist is someone who is obsessed with starting fires and can't help/stop themselves" (Participant 88)

The least common characteristics of concern included that people with arson convictions lack remorse for their offence (n = 3, 3.9%) and lack an understanding of the consequences of their offence (n = 3, 3.9%). Both concerns were used to explain negative

affective and behavioural attitudes and the belief that punishment is necessary to help people with arson convictions empathise or understand the consequences of arson.

"They need to receive punishment to realize that they have done something wrong." (Participant 45)

"I feel that arsonists have a lack of concern for the possible vast impact of their offending, for no real benefit." (Participant 52)

General Criminality. Three concerns relate to the general antisocial nature of people with arson convictions. The most common concern within this category was that people with arson convictions were particularly untrustworthy individuals (n = 16, 21.1%). This concern often underpinned negative behavioural attitudes to avoid interacting with this population.

"I believe they are untrustworthy people and hurtful, people and I would not want that energy or influence in my life or around people I interact with" (Participant 72)

Five participants (6.6%) reported concern that people with arson convictions have bad characters with poor personal morals/values. This concern often underpinned a lack of willingness to socially interact with people with arson convictions.

"I think it says something about someone's character and I'm not sure I would want a close relationship with someone like that" (Participant 13)

The concern that people with arson convictions are unwilling or unmotivated to change or be rehabilitated was reported by only one participant (1.3%).

"I think that they could be given a second chance with the right tools and support system but in saying so it depends on their willingness to change and commitment to change because otherwise any attempt to help could be pointless" (Participant 79)

Arson is a High Impact Crime. This category describes concerns relating to the impact that arson and people with arson convictions can have on people and property. The most common concern within this category was that arson or people with arson convictions

threaten the safety of people (*n* = 20, 26.3%). The majority of participants within this subcategory were explicitly concerned about their personal safety or the safety of their loved ones (*n* = 12, 60% of responses within this subcategory). This concern underpinned feelings of fear, worry, and an unwillingness to be in close proximity to or interact with people with arson convictions.

> *"I would try to avoid them as much as possible for my own safety or safety of my family/friends"* (Participant 22)

> *"I associate arsonists with people getting burnt/killed as must happen because of arson"* (Participant 18)

Concern for the safety of property was reported by 17 participants (22.4%). Again, the majority of participants reported concerns that people with arson convictions threaten the safety of their personal property (*n* = 10, 62.5% of responses within this subcategory). This concern underpinned feelings of anger, fear, and a lack of willingness to employ and rent to people with arson convictions.

> *"In terms of the tenant with arson conviction, I feel very worried if I rent a house to the person because I don't want to face the risk of losing my house"* (Participant 11)

> *"I feel somewhat angry towards people with arson convictions as they can cause significant damage to property and buildings*" (Participant 97)

Eleven participants reported concerns about the general widespread impact arson can have (*n* = 11, 14.5%), which often underpinned feelings of fear, anger and upset on behalf of those impacted by arson (i.e., empathic anger).

> *"It makes me angry how much damage it can do, and how so many people can be affected by arsonists.*" (Participant 32)

The least common concern in the category was about fire being a particularly dangerous weapon (*n* = 4, 5.3%), reflecting feelings of fear of arson offences.

"*Fires are dangerous, and I certainly wouldn't want to face one*" (Participant 65)

Sentencing and Rehabilitation Concerns. Within this category, most participants reported concerns about whether people with arson convictions had undertaken rehabilitative interventions or not (n = 5, 6.6%). In the absence of rehabilitative interventions, participants explained that they would be more socially distant from and less accepting of people with arson convictions.

"I won't accept them unless proper therapy/treatment has been provided" (Participant 8)

However, two participants (2.6%) reported the concern that punitive sentences may have counterproductive effects on rehabilitation; thus, leaving people with arson convictions worse off upon their re-entry to the community.

"My general view is that serving sentences are counterproductive to someone's rehabilitation" (Participant 67)

Another two participants (2.6%) reported concerns about a lack of effective rehabilitative interventions available to people with arson convictions, both of whom focused on unmet mental health related needs of people with arson convictions.

"I think that there's usually some reason behind why they commit arson in the first place and its usually mental illness. There isn't always a lot of help for mental illness unfortunately" (Participant 86)

Concern About Reoffending. The concern that people with arson convictions are likely to reoffend or need to be stopped from reoffending was highly prevalent, with 25 participants (32.9%) reporting this concern. This concern often underpinned feelings of fear and the perceived need for rehabilitative services and community support services to prevent reoffending.

"Because if they've done it once you know that they could do it again, it's the fear that they have knowledge of it." (Participant 89)

"It would be good to check up on that person within the community and see how their doing, to avoid them from falling into a situation where they feel like they need to reoffend." (Participant 39)

Arson Offences are Unfathomable. Seventeen participants (17.1%) reported being concerned because they could not comprehend why someone would commit arson. This concern often underpinned negative affective attitudes, such as fear, anger and confusion towards people with arson convictions.

"*There's a bit of fear that you don't know what triggered the behaviour and the motivation behind their acts"* (Participant 1)

"I understand stealing things – it gets used again, but burning stuff down? Burning down and destroying pisses me off. Learn to build a house don't burn one down. I don't get destruction like that, and I can't accept it" (Participant 62)

Concerns About People With Sexual Convictions

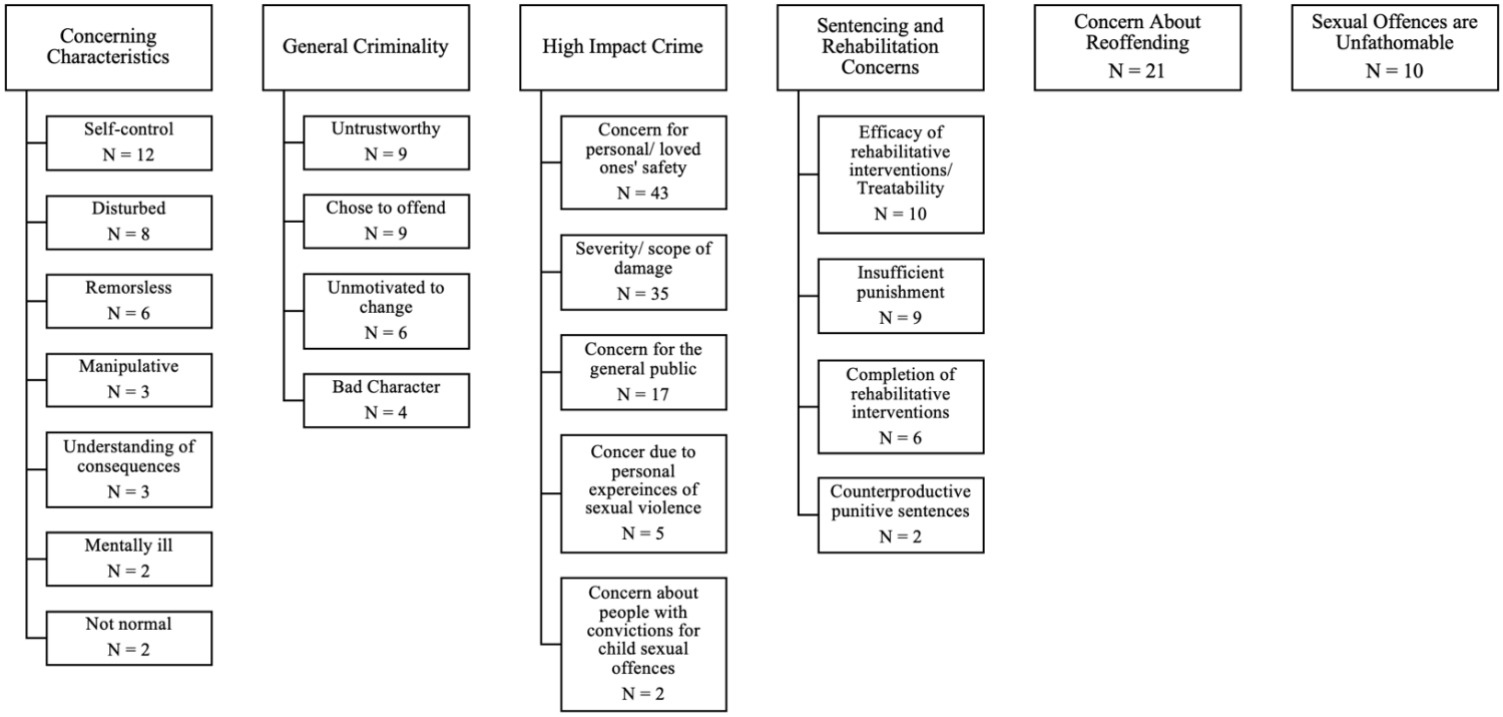
Ninety-five participants (96.9%) in the sexual conviction condition responded to at least one open-ended question. Of those who responded, 9 (9.5%) did not provide responses relevant to the research question, so these responses have not been reported here. This resulted in a final sample of 86.

Summative content analysis identified 22 distinct concerns about people with sexual convictions and their reintegration into society. These could be organised into the same six overarching categories as those identified for people with arson convictions: (1) concerning characteristics, (2) general criminality, (3) high impact crime, (4) sentencing and rehabilitation concerns, (5) concern about reoffending, and (6) concern because sexual

offences are unfathomable. See Figure 2 for a visual representation of each overarching category and their comprising subcategories.

Figure 2

Thematic Map of Concerns about People with Sexual Convictions (n = 86)



Concerning Characteristics. Participants reported having concerns about seven distinct characteristics related to people with sexual convictions, five of which were consistent with those identified in the arson condition. These common characteristics of concern include self-control, being disturbed, remorseless, lacking understanding of the consequences, and mental illness.

Most participants were concerned that people with sexual convictions lacked self-control (*n* = 12, 13.9%). Although the prevalence of this concern was comparable to that identified in the arson condition, there were notable differences in how some participants expressed this concern towards people with sexual convictions. Concerns about people with arson convictions lacking self-control only reflected participants' feelings of worry and fear.

In contrast, participants in the sexual offending condition (*n* = 3) expressed anger and disapproval towards people with sexual convictions due to their lack of self-control.

> *"I just have very little tolerance for people who clearly cannot control themselves and for sexual offenders in particular"* (Participant 72)

The second most common concern was that people with sexual convictions were disturbed (*n* = 8, 9.3%). Similar to the arson conviction condition, this concern also focused on the perception that these individuals get enjoyment from causing harm to others. However, responses appeared to reflect a more explicit negative cognitive attitude that people with sexual convictions are inherently flawed people, evident in the common use of phrases such as "complete predators", "sick people", "animalistic", and "mean at heart."

> *"Some are complete predators who may be indulging a fantasy or magnifying an inherent moral weakness to satisfy urges"* (Participant 9)

Six participants (7%) reported the concern that people with sexual convictions lacked remorse for their offence. This concern was more prevalent in relation to sexual than arson convictions (*n* = 3, 3.9%), but participants similarly explained that they would have more negative affective and behavioural attitudes towards those who did not demonstrate remorse.

> *"If I knew more about the harm caused to the victim I'd feel more sad, worried, angry about it, especially if the perpetrator shows no remorse"* (Participant 18)

Concern about a lack of understanding for consequences of the offence was just as prevalent towards people with sexual convictions (*n* =3, 3.5%) as it was for arson convictions and similarly underpinned negative affective attitudes and the belief that punishment is needed to help this population realise the consequences of sexual offending.

> *"I believe there should be some form of punishment, but alongside that a way for the person to realise their crime and the impact it had on others"* (Participant 96)

In contrast, concern about mental illness was less common towards people with sexual convictions (*n* = 2, 2.3%). Similar to the arson conviction condition, mental illness was believed to signal dangerousness and was often used to explain negative behavioural attitudes.

"I think you should always be alert around someone with a sexual offence conviction. I believe that they are generally not decent people and they are not mentally stable." (Participant 54)

The two remaining characteristics of concern were unique to people with sexual convictions. Three participants reported concern that people with sexual convictions are manipulative (*n* = 3, 3.5%) which often underpinned feelings of anger and upset, and two participants reported concern that they are not normal (*n* = 2, 2.3%), reflecting the perception that this population are psychologically distinct from the rest of society.

"I think they can be very intelligent and manipulative and therefore not very trustworthy" (Participant 62)

"A normally adapted human wouldn't carry out the offence" (Participant 74)

It is also notable that two concerning characteristics identified towards people with arson convictions were not identified for those with sexual convictions. These included: aggressive/dangerous and attraction to fire.

General Criminality. Four concerns were identified relevant to the general criminal nature of people with sexual convictions, with all but one consistent with those identified towards people with arson convictions. Similar to the arson conviction condition, concern about trustworthiness was the most prominent concern within this category (*n* = 9, 10.5%) and often underpinned a desire for social distance. Although, proportionately fewer participants expressed this concern towards people with sexual convictions than those with arson convictions.

"I would never fully trust/ be comfortable around someone like this" (Participant 76)

The second most common concern within this category was unique to people with sexual convictions and consisted of the concern that they had deliberately or consciously chosen to sexually offend (n = 9, 10.5%). This concern often underpinned feelings of anger and fear towards people with sexual convictions and beliefs about their blameworthiness.

"Those who knowingly choose to offend in this manner are for me beneath contempt." (Participant 9)

"These people have gone past what is normal in society and decided to disrespect other people and assault others without their permission. So, I am naturally scared of them and would prefer not to be around them" (Participant 67)

Concern about willingness/motivation to change was more prevalent towards people with sexual convictions (n = 6, 7%) than those with arson convictions. Participants often explained that they would hold more negative behavioural attitudes towards people who did not demonstrate motivation to become more prosocial.

"If they have remorse for their convictions, no desire to change and still have these tendencies then I would avoid them" (Participant 86)

The final concern about a bad character (n = 4, 4.7%) demonstrated comparable frequency across both conviction types and underpinned negative behavioural attitudes.

"I think you should always be alert around someone with a sexual convictions. I believe that they are generally not decent people" (Participant 54)

Sexual Offending is a High Impact Crime. Concerns relating to the impact of sexual offences or people with sexual convictions were widely reported within the sample and at a much higher frequency than in the arson conviction condition. In total, 102 concerns were reported regarding the impact of sexual offences compared to the 52 concerns reported

about the high impact impact of arson offences. Unlike the arson conviction condition, where participants were concerned about the harm to property and people, in the sexual conviction condition participants were concerned exclusively about the direct harm to people. Most participants reported being concerned that people with sexual convictions posed a threat to their safety or that of their loved ones (*n* = 43, 50%) which often underpinned feelings of fear and a desire for social distance.

"*I would never want such an offender near my family as my family's safety is very important to me*" (Participant 21)

"*For fear of safety of me and my family I would stay away from the offender.*" (Participant 79)

Nearly four times as many participants reported concerns about the widespread and severe impact sexual offences can have (*n* = 35, 41%) compared to arson offending. This concern similarly underpinned feelings of fear and empathic anger. However, six participants (7%) explained that because of the severe impacts, people who commit sexual offences deserve to be punished, whereas this belief was only reported by two participants in the arson convictions condition (2.6%).

"*I feel anger on behalf of the victim, who is now likely scarred for life.*" - Participant 11

"It can irreversibly ruin victims' lives so offenders need to face stern consequences" (Participant 58)

Seventeen participants (19.8%) reported being concerned that people with sexual convictions posed a threat to the general public. This concern was used to emphasise the importance of rehabilitative interventions as well as more punitive sentences for people with sexual convictions.

"I still strongly believe it's important for the sake of the community to try to rehabilitate them" (Participant 56)

"Injections to destroy their libido should be given to save innocent lives" (Participant 79)

Additionally, five participants reported being concerned due to personal experiences of sexual violence (5.8%), which underpinned negative affective attitudes, and two participants reported being concerned specifically about people with child sexual offence convictions (2.3%), both stating that they hold more negative attitudes towards this particular group.

"Having experience with sexual assault makes me feel uncomfortable around people with these convictions" (Participant 44)

"Accepting someone depends on the offence committed. If it was a child offence than never." (Participant 74)

Sentencing and Rehabilitation Concerns. Of the four subcategories relating to sentencing and rehabilitation, two were unique to people with sexual convictions. The first reflects the concern that rehabilitative interventions are ineffective for people with sexual convictions, either due to these individuals being untreatable or the nonexistence of effective treatment (n = 10, 11.6%). This concern often underpinned distrust in people with sexual convictions to desist.

"It's my opinion that the majority of sexual offenders do not change or rehabilitate so on that basis I would never trust individuals who have been convicted of sex offence" (Participant 75)

The second unique concern was that people who have committed sexual offences are not punished severely enough (n = 9, 10.5%). Responses within this category reflected both anger at the lack of perceived justice and the fear that lenient sentences fail to effectively deter sexual offending.

"They should not be given too much leniency as they'll take it as a sign that they can do it again without much punishment" (Participant 14)

"The anger is because these people convicted can change others' lives for the worse but then are most of the time let off without so much as a warning" - Participant 95

Despite these punitive concerns, six participants (7%) reported concern about whether or not rehabilitation had been undertaken, emphasising the value they placed on rehabilitative interventions, and two participants (2.3%) reported concern that punitive sentences were counterproductive to rehabilitation for people with sexual convictions. Notably, these frequencies are comparable to those reported in the arson condition.

"I would consider providing an individual who can provide evidence of rehabilitation an opportunity or my respect" (Participant 99)

"I believe that prison is not a good solution in my opinion, it just leads to more trauma" (Participant 24)

Concern About Reoffending. The concern that people with sexual convictions will reoffend was reported by 21 participants (24.4%), which is a lower frequency than that identified for people with arson convictions (n = 25, 32.9%). Similar to the arson conviction condition, this concern underpinned the perceived need for rehabilitative support and community protection, feelings of fear, and a desire for social distance.

"I would think they should be monitored within the community if they are to be free as I would worry about them committing another offence." (Participant 98)

Sexual Offences are Unfathomable. Ten participants reported being concerned because they could not comprehend why someone would commit a sexual offence (11.6%). Similarly to the arson conviction condition, responses within this category reflected participants' feelings of fear, anger and confusion.

> *"However, their behaviour confuses me, as someone with compassion. I can't see how they would hurt someone like that and it makes me fearful and grumpy. This is upsetting"* (Participant 24)

Summary of Findings

This study aimed to investigate the similarities and differences in public perceptions, attitudes and underlying mechanisms related to people with arson and sexual convictions. To do so, a combination of quantitative and qualitative measures were employed. Quantitative findings revealed that people with arson convictions were perceived as being significantly less likely to reoffend and more likely to be mentally ill, adolescent, and less dangerous than people with sexual convictions. In comparison, people with sexual convictions were perceived as significantly more likely than people with arson convictions to be untreatable and require imprisonment, therapy, and monitoring. Additionally, significantly more negative attitudes were reported towards people with sexual convictions than arson convictions.

Qualitative questions were employed to explore the concerns underpinning perceptions and attitudes towards people with arson and sexual convictions. Findings identified similar types of concerns associated with both conviction types, including concerns about characteristics, general criminality, the high impact of the crime, reoffending, sentencing/treatment, and concern because arson/sexual offending is unfathomable. However, differences were identified in the salience of concerns and how they related to perceptions and attitudes.

Discussion

This research represents the first direct investigation of public perceptions and attitudes towards people with arson convictions. Three research questions guided this exploratory study: (1) What are public perceptions and attitudes towards people with arson convictions in Aotearoa New Zealand? (2) What are the similarities and differences in public perceptions and attitudes towards people with arson and sexual convictions? (3) What are the primary concerns underlying public perceptions and attitudes towards people with arson convictions and people with sexual convictions? Research question 1 was addressed in Study 1 through an anonymous online qualitative survey with 60 student participants. Summative content analysis was used to identify the nature and prevalence of perceptions and attitudes towards people with arson convictions. Study 2 integrated these findings within a mixed-methods online survey employing a between-subjects experimental design to investigate research questions 2 and 3. Quantitative measures were developed or adapted from the existing research to identify similarities and differences in perceptions and attitudes towards people with arson and sexual convictions. Qualitative open-ended questions were nested throughout the survey, and responses were analysed using summative content analysis to explore the concerns underpinning negative perceptions and attitudes towards both groups. The following chapter will summarise and discuss the findings for each research question in the context of the existing literature. However, due to the infancy of research investigating perceptions and attitudes towards arson, caution is required when interpreting findings. Limitations, strengths, the implications of this research, and future directions for research will then be presented.

Research Question 1: What are Public Perceptions and Attitudes Towards People with Arson Convictions in Aotearoa New Zealand?

Results from study 1 identified a diverse range of predominantly negative perceptions and attitudes towards people with arson convictions. People with arson convictions were most frequently perceived as being mentally ill, addicted to fire, having difficult lives, young, dangerous, and likely to reoffend. Participants widely believed that rehabilitation was possible and worthwhile for people with arson convictions, and most supported psychological interventions followed by the need for imprisonment, reparations, monitoring, and fire-specific interventions. Participants' cognitive attitudes included people with arson convictions being unstable (emotionally, mentally and behaviourally), untrustworthy, and lacking intelligence. The most prevalent affective attitudes included anger, worry, general sadness, pity, and confusion. Despite these predominantly negative cognitive and affective attitudes, most participants reported that they would treat people with arson convictions the same as everyone else. However, social distance was still evident as several participants reported that they would act with caution around and maintain distance from people with arson convictions.

In relation to perceptions, previous research reports that the public has a limited and misinformed understanding of crime generally with a tendency to overestimate reoffence risk and dangerousness in particular (Barretto et al., 2018; Paulin et al., 2003; Thakker, 2012). This study indicates that this broader trend of perceptions also exists towards arson. Additionally, many of the perceived characteristics associated with arson are highly consistent with claims made in early psychiatric fire-setting literature. Similar to the present findings, this early literature heavily pathologised fire-setting and associated this behaviour with mental illness and adolescence (Barker, 1994; Geller, 1992; Geller et al., 1986; Nanayakkara et al., 2015; Ray, 1853). However, these generalisations are not entirely

empirically accurate. A pathological addiction to fire-setting referred to as pyromania, is exceedingly rare, with an estimated prevalence of 3-10% among people with fire-setting histories (Gannon & Pina, 2010; Sambrooks et al., 2021). Mental illness more broadly has been more consistently associated with fire-setting, particularly schizophrenia, mood disorders, personality disorders, and alcohol abuse (Nanayakkara et al., 2015; Sambrooks et al., 2021), but again the majority of people who commit arson do not have a diagnosed mental illness (Tyler & Gannon, 2012). Lastly, research has reported that fire interest and play are relatively normative developmental behaviours during childhood, and a substantial proportion of suspicious fires (50-63%) within Aotearoa New Zealand are attributed to young people (Fire and Emergency New Zealand, 2011; Lambie et al., 2019). However, due to the emphasis on diversion services in youth justice, relatively few young people are charged or convicted for arson. In fact, only 18.4% of charges for arson offences in 2020 were made against children and young people (Ministry of Justice, 2021b). These perceptions indicate that the public has a misinformed representation of people with arson convictions, which may have a wider influence on their attitudes towards this population

The dominant negative attitudes reported towards people with arson convictions are also consistent with both the general offending literature and the scant research considering public responses to arson. In line with present findings, the public often judges people who have generally offended as being violent and untrustworthy, leading to fear towards and social distance from this population (Barretto et al., 2018; Pratt & Clark, 2005). Some of these negative attitudes have been found to be particularly salient towards people with arson convictions. For example, the public has judged this population to be more violent and unproductive members of society and report less willingness to socialise with, live near or work with them when compared to a range of other offence types (e.g., alcohol misdemeanour, drug offences, fraud, domestic violence, burglary, manslaughter) (Hardcastle

et al., 2011; Perkins et al., 2009). It is possible that the saliency of these negative attitudes is enhanced by the stereotype that people with arson convictions are 'mentally ill offenders' (Walkden et al., 2021). This conflation of fire-setting and mental illness may result in a double stigma effect, whereby common stereotypes attached to people with mental illness and people who have offended (e.g. dangerous, unpredictable, untrustworthy, high risk and violent) become more salient for people that fit within both categories (i.e. people who have mental illness and have offended) (Walkden et al., 2021). This double stigma effect is thought to exacerbate social distance and exclusion of this population (Walkden et al., 2021). Further research investigating this possible double stigma effect is necessary to better understand the mechanisms underpinning negative attitudes towards people with arson convictions.

Although perceptions and attitudes were largely negative, there were several positive findings that are important to recognise. Perceptions of rehabilitation were particularly positive, with most participants believing that people with arson convictions can be rehabilitated, and most supporting psychological interventions more strongly than punitive sentences. Additionally, the majority of participants reported positive behavioural intentions to treat people with arson convictions equally. In contrast to these findings, previous research indicates punitive public responses through support for relatively long prison sentences (Casey & O'Connell, 1999) and limited support for government-assisted reintegration policies (Hardcastle et al., 2011), as well as discriminatory behavioural attitudes to exclude people with arson convictions from employment, accommodation and social interactions (Atkin & Armstrong, 2011; Hardcastle et al., 2011; Haslewood-Pócsik et al., 2008; Helfgott, 1997; Homeless Link, 2013; Perkins et al., 2009). It is possible that positive findings identified here were influenced by some of the perceived characteristics associated with arson offending. For example, youth crime is perceived very differently from adult crime, with research

consistently reporting that the public has a more rehabilitation-orientated approach towards youth and perceives them as being less responsible for their crimes (Barretto et al., 2018; Ghetti & Redlich, 2001; Scott et al., 2006). Research has also identified less perceived blameworthiness and greater belief in redeemability when offending is attributed to mental illness (Richards, 2018) along with the general increasing public awareness and acceptance of psychological interventions for mental illnesses (Schomerus et al., 2012). Thus, although they are not entirely empirically accurate, stereotypes of youth and mental illness may have allowed participants to recognise that people with arson convictions are capable of rehabilitation and deserve a second chance. It is also important to consider that these positive findings may be partly due to the sample being comprised of highly educated students residing in a country and city with a liberal political orientation (Parliamentary Service, 2021). These demographic factors have been associated with more positive attitudes towards people who have offended, greater belief in redeemability and greater support for rehabilitation-orientated sentencing (Call, 2019; Harper & Harris, 2017; Harper et al., 2017; Willis et al., 2013).

Taken together, these findings indicate that people with arson convictions are likely to encounter an array of negative perceptions and attitudes that have the potential to hinder their reintegration and desistance. Optimistically however, the public demonstrates support for rehabilitation and willingness to treat people with arson convictions equally, which may be vital to cultivating a social ecology that can more effectively support successful reintegration and desistance.

Research Question 2: What are the Similarities and Differences in Public Perceptions and Attitudes Towards People with Arson and Sexual Convictions?

Study 2 identified several differences in how people with arson convictions and sexual convictions are perceived. Perceived reoffence rate was high for both conviction types

but significantly higher for people with sexual convictions. In addition, people with arson convictions were perceived as, significantly more likely than people with sexual convictions to be mentally ill, adolescent, and less dangerous. In comparison, people with sexual convictions were perceived as, significantly more likely than people with arson convictions to be untreatable and require imprisonment, therapy, and monitoring. Overall, significantly more positive attitudes were reported towards people with arson convictions across all attitudinal measures.

These results are largely consistent with findings from previous research. The perceived characteristics more strongly associated with arson mirror the perceptions identified in study 1, particularly the beliefs that they are adolescent and mentally ill. This further suggests that these characteristics form a common stereotype of people with arson convictions. Also consistent with present findings, the sexual offending literature has reported that the public are particularly concerned about people who have sexually offended and pessimistic about their rehabilitation, thus resulting in more punitive sentences geared to provide control and punishment to this population (e.g., prison, monitoring in the community) (Cochran et al., 2020).

Perceived untreatability has been described as the "most deeply entrenched belief" about people with sexual convictions (Fedoroff & Moran, 1997, p. 269). Although the present study did identify this problematic belief to be more prominent in the sexual conviction condition, it is notable that the majority of participants still believed rehabilitation to be possible and more strongly endorsed the need for therapy for people with sexual convictions compared to those with arson convictions. However, these findings are consistent with previous research conducted in Aotearoa New Zealand (Barretto et al., 2018; Lowe & Willis, 2019; Thakker, 2012). Barretto et al. (2018) for example, identified that a large proportion (34%) of participants believed that rehabilitation should be a priority when addressing youth

perpetrated sexual offending. Additionally, Thakker (2012) reports that the majority of participants expressed that rehabilitation is possible for some people who have sexually offended depending on their characteristics (e.g. their motivation to change, empathy) and that regardless it is still at least important to try to rehabilitate them to minimise potential future harm (Thakker, 2012). More broadly, the public in Aotearoa New Zealand also appears to recognise that people who have offended, regardless of offence type, can change when given access to the right support (Lowe & Willis, 2019) and thus consider rehabilitation to be an integral part of the criminal justice system (Paulin et al., 2003). Therefore, the positive perceptions towards rehabilitation from sexual offending reported here may be reflective of normative public opinions on criminal justice and rehabilitation within Aotearoa New Zealand.

Despite these positive perceptions of rehabilitation, attitudes were still significantly more negative towards people with sexual convictions than arson convictions. This is consistent with the limited existing research comparing public attitudes to both arson and sexual offending. This existing research has most consistently identified more negative behavioural attitudes, including greater social distance (Hardcastle et al., 2011), exclusion from accommodation (Helfgott, 1997) and employment (Atkin & Armstrong, 2011), and less support for government-assisted reintegration policies (Hardcastle et al., 2011) in relation to people who have sexually offended compared to arson. The present study extended upon this research by investigating all attitudinal domains identifying that cognitive, affective and behavioural attitudes towards people with arson convictions tended to be somewhat neutral, whereas those towards people with sexual convictions were significantly more negative. The sexual offending literature has similarly reported that people who have sexually offended are one of the most negatively evaluated populations within society (Harper et al., 2017; Rade et al., 2016; Willis et al., 2010). These distinctly negative responses are thought to be partly due

to the moral panic and outrage associated with sexual violence (Harper & Harris, 2017; Klein & Cooper, 2019). The stereotype of people who sexually offend as being powerful males who prey on vulnerable victims is argued to exacerbate this moral condemnation (Harper & Harris, 2017). Further, the disproportionate coverage and fear-laden portrayals of sexual offending within news media may have sustained this moral panic over time (Fox, 2013; Klein & Cooper, 2019). Our findings provide further support for the distinctly negative public attitudes towards sexual convictions and thus indicate that arson is not associated with the same intensity of public outrage or panic in comparison.

Although public outrage towards arson has been documented in Australia, as previously described in the introduction, this may be due to cross-cultural differences in crime salience (Costelloe et al., 2009; McEwan et al., 2012). Wildfires are a persistent threat within Australia, causing extensive destruction across the country every year (McEwan et al., 2012). In these contexts, the impact of fire may be highly salient, causing deliberate fire-setting to be more harshly scrutinised by the public. In comparison, public attitudes may be more neutral within New Zealand due to the lower crime salience and perceived threat associated with deliberate fire-setting. Unlike arson, sexual offending may have a more universally high crime salience due to the greater overrepresentation and sensationalisation of sexual violence across news media (Harper, 2016; Thakker & Durrant, 2006). Future research would benefit from conducting cross-cultural comparisons of public perceptions and attitudes towards arson to investigate this.

In sum, these findings identified distinct stereotypes along with neutral to somewhat negative attitudes towards people with arson convictions. In contrast, participants expressed more negative perceptions and attitudes towards people with sexual convictions. These findings suggest that whilst negative public perceptions and attitudes have the potential to hinder reintegration and desistance for both populations, people with sexual convictions are

likely to encounter more intense and emotionally laden public responses than people with arson convictions within Aotearoa New Zealand.

Research Question 3: What are the Primary Concerns Underlying Public Perceptions and Attitudes Towards People with Arson Convictions and People with Sexual Convictions?

The final research question aimed to identify and compare concerns underpinning negative perceptions and attitudes towards people with arson and sexual convictions. Concerns reported for both arson and sexual convictions could be organised into the same overarching categories: (1) concerning characteristics, (2) general criminality, (3) high impact crime, (4) sentencing and rehabilitation concerns, (5) concern about reoffending, and (6) concern because arson/sexual offences are unfathomable. Similar concerns were reported within each of these categories in relation to arson and sexual offending; however, differences were identified in their salience and how they related to perceptions and attitudes.

Similarly, concerns about characteristics and general criminality focused on perceived internal deficits associated with both people with arson and sexual convictions, including a lack of self-control, understanding of consequences and remorse, and being disturbed, dangerous, mentally ill, untrustworthy, unmotivated to change, and to have a bad character. In doing so, these concerns acted to 'other' both populations from the rest of society whilst also homogenising and/or pathologising them (Richards, 2018). The common concern about the unfathomable nature of both offences further demonstrates this process of 'othering' as both people with arson and sexual convictions are perceived as predatory outsiders. As a result, these concerns elicited similar negative attitudes of fear, anger and a desire for social distance from people with both conviction types.

However, distinguishing conviction types, people with arson convictions were more explicitly pathologised, evident through the more salient concern about their mental health,

and the unique concern about their abnormal attraction to fire. This pattern mirrors findings within Study 1 and the quantitative component of Study 2. In contrast, people with sexual convictions appeared to be more explicitly homogenised as being inherently flawed, manipulative people who consciously chose to offend, making them more blameworthy and untreatable. These distinct beliefs about sexual offending are consistent with the distorted "sexual offender schema" proposed by Harper and Bartels (2016). This schematic representation is thought to have been proliferated by the media and automatically drawn upon by the public when evaluating people who have sexually offended. It is possible that media related to people with arson convictions has similarly contributed to the distinct schematic representation of this population. For example, that they are mentally ill, unstable, aggressive, untrustworthy, young, and have an abnormal interest in fire. Further research is necessary to explore media portrayals related to arson to determine if and how they have influenced public perceptions and attitudes.

Also distinguishing conviction types, a much higher frequency of participants expressed concerns about the high impact of sexual offences, including the long-lasting, adverse, and direct impacts on victims. In comparison, participants expressed greater awareness of the diverse potential impacts of arson, including both direct harm to people and indirect harm through property damage, reflecting the specific nature of this offence. For both conviction types, these concerns similarly underpinned strong feelings of fear, desire for social distance and the perceived need for immediate rehabilitative interventions. However, feelings of empathic anger and punitive beliefs appeared to be more salient in relation to sexual offending. In line with these findings, previous research has consistently reported that the public tends to respond more negatively towards crimes involving direct victimisation (e.g., assault), perceiving them to be more severe, serious, and wrongful than crimes involving indirect victimisation (e.g. property offences) (Adriaenssen et al., 2018; Hardcastle

et al., 2011; Vogel & Meeker, 2001). The sexual offending literature also commonly reports the public associate sexual victimisation with populations who are perceived to be the most vulnerable in society (children and women) (Harper & Bartels, 2016) and who are perceived to then experience a uniquely severe level of suffering as a result of this sexual victimisation (Pickett et al., 2013). This representation of sexual offending is thought to enhance public outrage and support for retributive sentencing, mirroring present findings (Pickett et al., 2013). In contrast, the potentially more indirect impact of arson may diminish the perceived severity and intensity of negative attitudes associated with the consequences of this offence type.

However, somewhat contradictory to this pattern of results, participants in the arson convictions condition more frequently expressed concerns about reoffending than those in the sexual conviction condition. This finding is also inconsistent with the quantitative component of Study 2, which identified a significantly higher perceived risk for sexual reoffending. Although this finding is difficult to interpret due to the limited research in this field, it may further indicate that negative attitudes related to sexual offending are more victim-orientated than arson (Pickett et al., 2013). Rather than focusing on whether someone will reoffend, participants' attitudes were focused on the severity of harm caused by these potential sexual offences. In comparison, concerns about arson may be more risk-management orientated, which is thought to be underpinned by the belief that an offence is becoming increasingly prevalent, and fear about the difficulty of protecting oneself from this offence (Pickett et al., 2013). These potential differences in how arson and sexual offences are conceptualised may also influence public opinions about sentencing and treatment.

Sentencing and treatment concerns were found to be more salient and more punitive in relation to people with sexual convictions than arson convictions, with unique concerns about the inefficacy of rehabilitation and insufficient punishment for this population

(Cochran et al., 2020; Harper et al., 2017; Willis et al., 2010). In line with the general pattern of our findings, previous research reports that greater perceived severity and victim-orientated concerns are associated with more punitive perceptions and attitudes (Ghetti & Redlich, 2001; Hardcastle et al., 2011; Hechler & Kessler, 2018; Pickett et al., 2013; Willis, 2014). It is also possible that these differences in sentencing and treatment concerns were influenced by distinct concerning characteristics and concerns about general criminality associated with arson and sexual offending. Research has identified that sentencing perceptions can be underpinned by implicit theories on human attributes such as internality, controllability and stability (Maruna & King, 2009; Richards, 2018). Within the sexual conviction condition, participants appeared to attribute offending to unchangeable internal factors (e.g. an inherently flawed character) within the individual's control (e.g., conscious choice to offend). This pattern of implicit theories has been associated with moral outrage, punitiveness, beliefs about blameworthiness, and the belief that rehabilitation is impossible and undeserved (Hechler & Kessler, 2018; Imhoff, 2015; Jahnke, 2018; Jahnke et al., 2015; Maruna & King, 2009; Richards, 2018). In comparison, in the arson convictions condition, participants appeared to be more focused on internal factors outside of an individual's control but those which can still be improved through treatment (e.g., mental illness and attraction to fire), which have previously been associated with lower perceived blameworthiness and more rehabilitation-orientated perceptions (Imhoff, 2015; Richards, 2018). However, future research would benefit from further exploring how these implicit theories relate to people with arson convictions underpin attitudes towards this population in greater depth. Collectively these findings indicate that similar concerns underpin perceptions and attitudes towards both people with arson and sexual convictions. However, concerns about people with arson convictions suggest that the public over-pathologises this population, often resulting in fear and a desire for social distance, but also potentially reinforces support for rehabilitation.

In contrast, concerns about people with sexual convictions appeared to underpin more intense feelings of anger as these individuals were deemed to be more blameworthy and as having committed offences with particularly pervasive consequences, which thus justified more punitive sanctions.

Limitations and Strengths

This research has provided novel insight into some public perceptions and attitudes that may act as reintegration barriers for people with arson convictions. A key strength of the current research is its mixed-method design. In particular, the use of open-ended questions allowed us to explore attitudes in an area where little existing research exists and allowed participants to explain their perspectives on their own terms, which enhanced both the scope and depth of understanding of their perceptions and attitudes. Secondly, sample sizes employed in both studies were sufficiently large (Braun et al., 2020). Larger sample sizes are most suitable when studying phenomena that vary widely within a diverse target population, and they can help combat the potential shallowness of data that is more typical within online qualitative surveys than other qualitative methodologies (e.g., interviews) (Braun et al., 2020). A final strength of this research is the consideration for mechanisms underpinning perceptions and attitudes, which existing literature has somewhat overlooked (Brown, 2009; Harper, 2016). By failing to consider these underlying mechanisms, Brown (2009) argues that interventions cannot be tailored to target negative attitudes effectively. Thus, our findings have greater implications for practice by including these mechanisms within our analysis.

However, this research has several methodological limitations which are important to consider. The use of convenience sampling may have resulted in a sample of participants with a particular interest in the research topic and thus not representative of the general population. Sampling characteristics (e.g., educational attainment, politically liberal place of residence), as previously discussed, also may have biased findings. Educational attainment

among participants was particularly high when compared to the general population. For example, in Study 2, 38.9% and 13.1% of participants had a bachelor's degree and a master's/doctoral degree respectively, whereas only 14.6% and 4.5% of the general population of Aotearoa New Zealand report having such qualifications (Statistics New Zealand, 2018). As higher educational attainment has been associated with more positive attitudes towards people who have offended (Brown et al., 2008; Willis, 2014; Willis et al., 2013), the current findings may underestimate the extent of negative perceptions and attitudes within society towards people with arson and sexual convictions. It is also possible that more pronounced differences in perceptions and attitudes towards people with arson and sexual convictions would have been identified had a more representative sample been used. Future research in Aotearoa New Zealand would benefit from recruiting a larger sample more representative of the general population.

In addition to these sampling limitations, data quality may have been compromised by the use of online surveys (Goodman & Paolacci, 2017). Although conducting this research online allowed us to recruit a more geographically diverse sample and provide participants with greater perceived anonymity promoting more open and honest responses (Braun et al., 2020), it is not possible to monitor or control the conditions under which online surveys are completed. As a result, participants may be impacted by external distractions, interruptions and inattention. However, in the present study, post-hoc data quality checks (e.g., long string responding and response time) and the richness of data provided in qualitative responses did not indicate inattentive responding. Although, there was some evidence of neutral response bias in the quantitative component of Study 2, particularly within perception items, which has been argued to indicate inattention, social desirability, or avoidance of cognitive effort (Chyung et al., 2017; Gadd et al., 2011). Responses to open-ended questions provided further

insight and indicated that this pattern of responding was not due to inattention but to an unwillingness to make generalisations about people with either arson or sexual convictions.

This unwillingness to make generalisations about people with arson or sexual convictions is somewhat surprising considering that previous research has consistently reported the tendency of the public to homogenise people with criminal convictions (Lowe & Willis, 2019; Lowe & Willis, 2021). However, Harris and Socia (2014) argue that measures routinely employed across research may inflate this homogenisation by implicitly forcing participants to make generalisations and through using offence-based labels. Although the quantitative measures employed in Study 2 also implicitly forced homogenisation, the use of person-first language may have primed participants to recognise the individual and their diversity instead of a stereotype, thus resulting in this neutral response pattern (Harris & Socia, 2014; Lowe & Willis, 2019; Lowe & Willis, 2021; Willis, 2018). However, it is still possible that the use of items that implicitly forced homogenisation inadvertently influenced perceptions and attitudes biasing findings. Additionally, most items employed were negatively framed, which previous research indicates can increase the intensity of negative attitudes (Lawrence & Willis, 2021). Future research should consider employing more positively framed items and open-ended questions in conjunction with person-first language to provide a more balanced understanding of public attitudes towards people with arson convictions.

A final limitation associated with the use of online surveys is the inability of researchers to follow up with participants to seek clarification or expansion on their responses (Braun et al., 2020). This limitation was particularly apparent in the present study when investigating underlying mechanisms, as the prompts used were ineffective in eliciting in-depth explanations of these mechanisms. As a result, whilst participants expressed concerns, they did not fully explain why they had these concerns. To facilitate a more comprehensive

understanding of mechanisms underlying attitudes related to arson, future research could conduct in-person interviews or focus groups (Lowe & Willis, 2019; Thakker, 2012). However, these approaches would prevent interviewees from remaining anonymous to the research team, which could negatively impact data quality as participants may be less open and honest (Braun et al., 2020; Braun et al., 2017). Braun et al. (2017) have discussed the advantages of conducting interviews and focus groups in online environments (e.g., through internet-based video calling, email, instant messaging) to investigate complex or sensitive topics, as the detached nature of online research provides participants with greater perceived anonymity and control over their environment (Braun et al., 2017). Future research should therefore consider these innovative qualitative methodologies to further investigate perceptions, attitudes and underpinning mechanisms related to people with arson convictions.

Implications

This research represents the first study to directly and comprehensively explore public perceptions and attitudes towards people with arson convictions. Findings identified a wide range of predominantly negative public responses that may act as barriers to successful reintegration and desistance. As such, it is important to consider how these problematic public perceptions and attitudes can be addressed in order to create a social ecology that is more conducive to reintegrating people with arson convictions. To enhance the efficacy of anti-stigma interventions, it is imperative to have an in-depth understanding of the mechanisms underpinning problematic perceptions and attitudes, which the current study aimed to achieve by exploring participants' primary concerns (Harper et al., 2017; Jahnke, 2018). Concerns identified indicate particularly problematic stereotypes attached to people with arson convictions such as lacking self-control and being disturbed, aggressive, attracted to fire, untrustworthy and having bad characters. Not only did these concerns result in the othering, homogenisation and/or pathologisation of people with arson convictions, but they

also underpinned fear, anger and social distance, demonstrating the significant reintegration barriers they may create.

One common approach to addressing stereotypes towards stigmatised populations has been through educational interventions (Harper et al., 2017; Willis et al., 2010). However, research has indicated that informative interventions may be insufficient at targeting more deep-seated emotionally laden attitudes and can, in some instances, enhance the saliency of stereotypes exacerbating negative perceptions and attitudes (Harper et al., 2021; Lawrence & Willis, 2021). Additionally, given that some misperceptions of people with arson convictions (e.g. mental illness and youth) may underpin positive sentencing and treatment perceptions, interventions correcting these misperceptions may have unintended counterproductive effects. Alternatively, previous research has indicated that humanising interpersonal contact may more effectively target negative public attitudes (Harper et al., 2021; Lawrence & Willis, 2021; Willis et al., 2010).

Positive interpersonal contact with stigmatised populations is argued to challenge negative public attitudes by providing tangible counter-stereotypical representations emphasising peoples' diversity and shared humanity (Harper et al., 2021; Lawrence & Willis, 2021). Previous interventions have typically utilised indirect forms of interpersonal contact, such as humanising narratives (Lawrence & Willis, 2021). Humanising narratives can come in many forms, including first-person written messages, videos, poetry or even art created by members of stigmatised populations (Dum et al., 2021; Harper et al., 2021; Miner-Romanoff, 2016). Harper et al. (2021) recently reported that watching short videos of people with paedophilic sexual interests describing their lived experiences was associated with significant improvements in beliefs about dangerousness and intentionality. These improvements were still evident after four months, suggesting that this form of intervention can provide long-lasting positive impacts (Harper et al., 2021). Future research should consider how narrative

humanisation may impact negative public perceptions and attitudes towards people with arson convictions. If successful, social marketing and media campaigns may offer an effective means of disseminating interventions on a larger scale, as the public report acquiring most of their knowledge about arson from mass media sources.

Future Directions

The findings from this research provide a starting point for future research into perceptions and attitudes toward people with arson convictions. Given the lack of existing research in this area, future research would benefit from validating measures employed in Study 2 to develop a standardised measure of perceptions and attitudes towards people with arson convictions. A standardised measure would enhance the replicability of research and facilitate more meaningful comparisons across studies. For example, research could explore how public responses to arson vary under different experimental conditions (e.g., different offence characteristics), or across different cultures, monitor their change over time, examine how they relate to respondent characteristics (e.g., age, gender, implicit theories) or evaluate the efficacy of interventions designed to lessen negative public perceptions and attitudes.

Future research should also consider exploring perceptions and attitudes held by professionals within the criminal justice system who work with people with arson convictions (e.g., probation officers, police officers, forensic psychologists etc.). Such professionals directly impact reintegration and rehabilitative opportunities available to people with arson convictions (Fortney et al., 2007). Therefore, it is imperative to determine if negative public perceptions and attitudes are also prevalent within professional contexts and how this impacts the quality of care provided to people with arson convictions. Previous research in the sexual offending literature reports that treatment providers are often unwilling to work with people who have sexually offended (Bach & Demuth, 2018; Stiels-Glenn, 2010) and hold common misperceptions including, a lack of confidence in rehabilitation efficacy (Engle et al., 2007),

overestimation of sexual reoffence risk and belief in the 'stranger-danger' myth (Fortney et al., 2009). These pessimistic misperceptions may have severe implications for treatment quality as providing clients with accurate and hopeful information is essential for effective risk prevention planning, developing therapeutic alliance, and promoting treatment engagement (Fortney et al., 2007). Research has also documented that associative stigma from working with people who have sexually offended results in emotional exhaustion and depersonalised care among professionals, and lower treatment satisfaction and greater self-stigma internalization among clients (Jesse, 2015; Verhaeghe & Bracke, 2012). It would be beneficial for future research to consider how negative public responses towards people with arson convictions impact professionals who work with this population: do these professionals hold common negative perceptions and attitudes, do they experience associative stigma from their work, and how do these perceptions, attitudes and experiences impact the quality of care they provide to their clients?

Perceptions and attitudes among professionals working outside of the criminal justice system also warrants further empirical exploration. For example, landlords, employers, and education providers act as direct gatekeepers to basic yet fundamental human needs (e.g., accommodation, employment, education) to support successful reintegration and desistance. Further research should explore how a conviction for arson may impact professionals' decisions to provide or withhold access to these basic needs. This insight may be used to inform tailored interventions addressing negative perceptions and attitudes within specific groups of professionals. Such specialised interventions may be vital to encourage multiagency cooperation and collective efficacy needed to create reintegration opportunities and support desistance for people with arson convictions (Willis et al., 2010).

Lastly, future research should consider the lived experiences of people with arson convictions of reintegration and desistance. Understanding the unique subjective perspectives

of people with arson convictions regarding the impact negative public responses have on their wellbeing, reintegration, and desistance will provide insight into the re-entry support that is most necessary. Furthermore, understanding how individuals navigate or cope with reintegration barriers may help identify additional protective factors supporting desistance. This research would provide beneficial implications to the currently limited theoretical literature on fire-setting desistance.

Conclusion

This research aimed to conduct the first systematic investigation of public perceptions and attitudes towards people with arson convictions. Findings indicate a diverse range of predominantly negative perceptions and attitudes towards people with arson convictions. Although public responses were less negative towards people with arson convictions than sexual convictions, concerns underpinning perceptions and attitudes towards both groups were similar. These findings, along with future research in this area, are imperative to better understand the potential barriers to reintegration and desistance that people with arson convictions face and any areas where community interventions are needed.

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Appendices

Appendix A: Demographic Questions

How old are you?

- ○ 18-19
- ○ 20-29
- ○ 30-39
- ○ 40-49
- ○ 50-59
- ○ 60-64
- ○ 65+

Which of the following do you most identify with?

- ○ Male
- ○ Female
- ○ Gender non-conforming
- ○ Other _____
- ○ Prefer not to say

Please select up to 3 ethnic groups you identify with or feel strongly you belong to?

- ☐ New Zealand Pākehā
- ☐ Other European
- ☐ Māori
- ☐ Samoan
- ☐ Cook Islands Māori
- ☐ Tongan
- ☐ Niuean
- ☐ Tokelauan
- ☐ Fijian
- ☐ Other Pacific Peoples
- ☐ Chinese
- ☐ Indian
- ☐ Other Asian
- ☐ Middle Eastern
- ☐ Latin American
- ☐ African
- ☐ Other

What is the highest level of education you have completed? (Only tick one box)

- ○ Form 3 or 4/Year 9 or 10

- School Certificate/NCEA Level 1
- Sixth Form Certificate/ NCEA Level 2
- Bursary/University Entrance/NCEA Level 3
- Tertiary (post-school) certificate or diploma
- Bachelor's degree
- Bachelor's degree with Honours
- Master's or Doctoral degree

Please select your current occupation

- Beneficiary (public assistance)
- Student
- Administration/Sales
- Education
- Health
- Hospitality or Tourism
- Human Resources/Recruitment
- Other professional
- Sport/recreation
- Tradesperson/services

Do you currently own a property e.g. A house or Apartment?

- Yes
- No

Are you currently renting a personal property/properties to others? (Study 2: Are you currently renting your property/properties to other people? Display logic: only presented if the answer to Q10 was yes)

- Yes
- No

Do you know someone who has a criminal conviction?

- Yes
- No
- Prefer not to say

Appendix B: Study 1 Survey Questions

- What do you know about people with arson convictions?
- Why do you think people might commit arson offences?
- What characteristics do you think people with arson convictions have?
- Where does your information about people with arson convictions come from?
- What are your first thoughts when you think of someone who has been convicted of an arson offence?

- What emotions do you feel when you think of someone who has been convicted of an arson offence?
- How do you think people who have committed an arson offence should be sentenced?
- How do you think you would behave towards someone with an arson offence?
- Do you think people with arson convictions are dangerous? If so, who do you think they are dangerous to?
- Do you think people with arson convictions can be rehabilitated?

- What, if any, support do you think people with arson convictions would need to reintegrate back into the community?
- Do you think people with arson convictions may experience any barriers to reintegrating into the community?
- What, if any, concerns do you have regarding someone with and arson conviction being release back into the community?
- Please rate on the scale provided, how dangerous you think individuals with arson convictions are compared to individuals with:

	0: Much less dangerous	1	2	3: Neutral	4	5	6: Much more dangerous
Sexual convictions	○	○	○	○	○	○	○
Violent convictions	○	○	○	○	○	○	○
Criminal damage convictions	○	○	○	○	○	○	○
Theft convictions	○	○	○	○	○	○	○

Appendix C: Evaluation of Existing Measures to Represent Prevalent Perceptions Towards People with Arson Convictions

Perception of people with arson convictions	Existing item	Reference	Possible adaptation for Study 2	Comments
Mental illness	Most sex offenders commit sex crimes because they are mentally ill.	(Call, 2019)	Most people with arson convictions committed arson because they are mentally ill.	Selected for Study 2.
	What percent of sex offenders do you believe are severely mentally ill?	(Levenson et al., 2007)	What percent of people with arson convictions do you believe are severely mentally ill?	Not a proposition/Likert scale based item.
Addicted to fire	A paedophile is addicted to children.	(McCartan, 2010)	A person with an arson conviction is addicted to fire/sex	Selected for Study 2.
	A paedophile has an unhealthy attitude to children.		People with arson convictions have an unhealthy attitude to fire/sex	Too vague to accurately capture the perception.
	People who commit sex offenses want to have sex more often than the average person.	(Church et al., 2007)	People who commit arson offences want to set fires more often than the average person.	Too vague to accurately capture the perception.
Have difficult lives	Most sex offenders commit sex crimes because of rejection in the past.	(Call, 2019)	Most people with arson convictions committed arson because of rejection in the past.	Too specific to accurately capture the perception.
	Most sex offenders commit sex crimes because they have been abused themselves.		Most people with arson convictions commit arson because they have been abused ~~themselves~~.	Too specific to accurately capture the perception.
	What percentage of adult offenders were sexually abused as children?	(Levenson et al., 2007)	What percentage of people with arson convictions were abused as children?	Too specific to accurately capture the perception.
Young	Approximately 20% of sex offenders are juveniles.	(Rosselli & Jeglich, 2017)	Approximately 20% of people with arson convictions are juveniles.	Unclear if participants perceive a greater or lesser proportion juveniles.
Dangerous	Only a few sex offenders are dangerous.	(Church et al., 2007)	Only a few people with arson convictions are dangerous.	Selected for Study 2.
Likely to reoffend	Estimate the overall reoffending rate (0 –100%) for released sex offenders.	(Willis et al., 2010)	Estimate the overall reoffending rate for people with arson convictions.	Selected for Study 2.
Should be rehabilitated	Sex offenders cannot be successfully rehabilitated.	(Olver & Barlow, 2010)	People with arson convictions cannot be successfully rehabilitated.	Selected for Study 2.
	Trying to rehabilitate a sex offender is a waste of time.	(Church et al., 2007)	Trying to rehabilitate a someone with an arson convictions is a waste of time.	This reflects a cognitive attitude.
	Trying to rehabilitate sex offenders is a waste of time and money.	(Hogue et al, 2019)	Trying to rehabilitate a someone with an arson convictions is a waste of time and money.	This reflects a cognitive attitude.
Psychological interventions	Sex offender who receive specialised psychological treatment will reoffend.	(Levenson et al., 2007)	People with arson convictions who receive	This is a perception of reoffence risk too.

			specialised psychological treatment will reoffend.	
	Sex offenders should be forced to undergo therapy.	(Imhoff, 2015)	People with arson convictions should be forced to undergo therapy.	This reflects a cognitive attitude regarding human rights/autonomy.
Prison	How many years do you believe that sex offenders should serve in prison?	(Levenson et al., 2007)	How many years do you believe that people with arson convictions should serve in prison?	Not a proposition/Likert scale based item.
	Do you think prison is effective in reducing sexual offenses?		Do you think Restitution is effective in reducing arson offences?	Not a proposition/Likert scale based item.
Reparations	Do you think Restitution is effective in reducing sexual offenses?	(Levenson et al., 2007)	Do you think Restitution is effective in reducing arson offences?	Not a proposition/Likert scale based item.
Socially isolated	Sex offenders prefer to stay home alone rather than be around lots of people.	(Church et al., 2007)	People with arson convictions prefer to stay home alone rather than be around lots of people.	Too specific to accurately capture the perception.
	Most sex offenders do not have close friends.		Most people with arson convictions do not have close friends.	Selected for Study 2.
	Most sex offenders keep to themselves.		Most people with arson convictions keep to themselves.	Too specific to accurately capture the perception.
Substance abuse	What role do you believe alcohol and other drugs play in sexual offenders committing sexual crimes?	(Cowan et al., 2020)	What role do you believe alcohol and other drugs play in committing arson offences?	Not a proposition/Likert scale based item.
	Alcohol and drugs play a moderate or major role in sex offending.	(Levenson et al., 2007)	Alcohol and drugs play a major role in arson offending.	Selected for Study 2. 'Moderate' was removed for clarity.
Monitoring	Do you think prison is effective in reducing sexual offenses?	(Levenson et al., 2007)	Do you think Electronic monitoring is effective in reducing arson offences?	Not a proposition/Likert scale based item.

Appendix D: Study 2 Survey Questions

- Please rate how much you agree or disagree with the following statements by responding on the scale provided. (Impression Management Subscale; Paulhus, 1991)

- Using the sliding scale provided, please answer the following question about people with arson convictions

What percent of people with arson convictions do you believe reoffend?	0 10 20 30 40 50 60 70 80 90 100

- Using the scale provided, please rate how much you agree or disagree with the following statements about people with arson convictions

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
Most people with arson convictions commit arson because they are mentally ill.	○	○	○	○	○
A person with an arson conviction is addicted to fire.	○	○	○	○	○
Most arson offences are committed by adolescents.	○	○	○	○	○
Only a few people with arson convictions are dangerous.	○	○	○	○	○
People with arson convictions cannot be successfully rehabilitated.	○	○	○	○	○
Most people with arson convictions do not have close friends.	○	○	○	○	○
Alcohol and drugs play a major role in arson offending.	○	○	○	○	○
People with arson convictions should receive a prison sentence.	○	○	○	○	○
People with arson convictions should receive therapy.	○	○	○	○	○
People with arson convictions should be monitored within the community.	○	○	○	○	○
People with arson convictions should provide reparations for their offence (e.g., monetary fine, community service).	○	○	○	○	○

- Please briefly explain why you have these perceptions of people with arson convictions?

- Using the scale provided, please rate how much you agree or disagree with the following statements about people with arson convictions

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Give someone with an arson conviction an inch and they take a mile.	○	○	○	○	○
Trying to rehabilitate someone with an arson conviction is a waste of time and money.	○	○	○	○	○
People with arson convictions only think about themselves.	○	○	○	○	○
Most people with arson convictions are too lazy to earn an honest living.	○	○	○	○	○
People with arson convictions are just plain mean at heart.	○	○	○	○	○
People with arson convictions are always trying to get something out of somebody.	○	○	○	○	○
People with arson convictions respect only physical force.	○	○	○	○	○

- Using the scale provided, please rate how much you agree or disagree with the following statements about people with arson convictions

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
People with arson convictions are very emotional.	○	○	○	○	○
People with arson convictions cannot control their impulses.	○	○	○	○	○
People with arson convictions are mentally unstable.	○	○	○	○	○
It is not wise to trust a person with an arson conviction.	○	○	○	○	○
People with arson convictions generally have a lower level of IQ compared with the rest of the population.	○	○	○	○	○

- Please briefly explain why you have these opinions about people with arson convictions?

- Please rate on the scale provided how you generally feel about people with arson convictions

	Extremely negative	Moderately negative	Slightly negative	Neither positive nor negative	Slightly positive	Moderately positive	Extremely positive
How do you generally feel about people with arson convictions?	○	○	○	○	○	○	○

- Using the scale provided, please rate how much you agree or disagree with the following statements about people with arson convictions

	Completely Disagree	Mostly Disagree	Somewhat Disagree	Undecided	Somewhat Agree	Mostly Agree	Completely Agree
When I think of people with arson convictions, I feel fear.	○	○	○	○	○	○	○
When I think of people with arson convictions, I feel	○	○	○	○	○	○	○
When I think of people with arson convictions, I feel pity.	○	○	○	○	○	○	○
When I think of people with arson convictions, I feel	○	○	○	○	○	○	○
When I think of people with arson convictions, I feel	○	○	○	○	○	○	○
When I think of people with arson convictions, I feel	○	○	○	○	○	○	○

- Please briefly explain why you feel these emotions towards people with arson convictions?

- Please rate on the scale provided, whether or not you would accept someone with an arson conviction as:

	Most definitely	Probably not	Undecided	Probably yes	Most definitely
Your neighbour	○	○	○	○	○
A colleague at work	○	○	○	○	○
Your boss	○	○	○	○	○
An acquaintance	○	○	○	○	○
A member in your church/sports club/community	○	○	○	○	○
A close friend	○	○	○	○	○
A partner in marriage/civil union	○	○	○	○	○
A son/daughter-in-law	○	○	○	○	○

- Please rate on the scale provided, whether or not you would:

	Most definitely not	Probably not	Undecided	Probably yes	Most definitely
Employ someone with an arson conviction.	○	○	○	○	○
Accept onto an educational course someone with an arson conviction.	○	○	○	○	○
Rent a house/apartment to someone with an arson conviction.	○	○	○	○	○
Treat someone with an arson conviction the same as everyone else.	○	○	○	○	○
Try to stay away from someone with an arson conviction.	○	○	○	○	○
Be constantly on guard around someone with an arson conviction.	○	○	○	○	○

- Please briefly explain why you would behave in this way towards people with arson convictions?

Appendix E: Item-level Statistics for Attitude Scales Employed in Study 2

Cognitive Attitude Items

	Arson Conviction Condition						Sexual Conviction Condition					
	M (SD)	4 Strongly disagree	3	2	1	0 Strongly agree	*M* (SD)	4 Strongly disagree	3	2	1	0 Strongly agree
Give someone with an arson/sexual offence conviction an inch and they take a mile.	2.14 (.81)	3.0	12.1	57.6	22.2	5.1	1.90 (.85)	4.0	26.3	48.5	18.2	3.0
Trying to rehabilitate someone with an arson/sexual offence conviction is a waste of time and money.	3.10 (.76)	1.0	1.0	15.2	52.5	30.3	2.74 (.99)	3.0	9.1	19.2	48.5	20.2
People with arson/sexual offence convictions only think about themselves.	2.28 (1.09)	5.1	23.2	20.2	41.4	10.1	1.76 (1.06)	13.1	28.3	31.3	24.2	3.0
Most people with arson/sexual offence convictions are too lazy to earn an honest living.	2.78 (.86)	1.0	4.0	32.3	41.4	21.2	2.80 (.83)	2.0	1.0	31.3	46.5	19.2
People with arson/sexual offence convictions are just plain mean at heart.	2.49 (.87)	1.0	10.1	39.4	37.4	12.1	2.08 (1.05)	6.1	25.3	30.3	31.3	7.1
People with arson/sexual offence convictions are always trying to get something out of somebody.	2.67 (.88)	1.0	7.1	33.3	41.4	17.2	2.09 (.97)	8.1	14.1	41.4	31.3	4.0
People with arson/sexual offence convictions respect only brute force.	2.52 (.84)	2.0	4.0	46.5	35.4	12.1	2.22 (1.10)	3.0	26.3	31.3	24.2	15.2
People with arson/sexual offence convictions are very emotional.	1.77 (.81)	3.0	34.3	48.5	11.1	3.0	2.21 (.80)	1.0	13.1	56.6	22.2	7.1
People with arson/sexual offence convictions cannot control their impulses.	1.52 (.95)	11.1	44.4	29.3	12.1	3.0	1.34 (1.0)	17.2	50.5	15.2	15.2	2.0
People with arson/sexual offence convictions are mentally unstable.	1.70 (.84)	4.0	40.4	39.4	14.1	2.0	1.60 (.95)	10.1	38.4	37.4	10.1	4.0
It is not wise to trust a person with an arson/sexual offence conviction.	1.85 (.96)	5.1	35.4	30.3	24.2	3.0	1.36 (.85)	17.2	36.4	38.4	7.1	0.0
People with arson/sexual offence convictions generally have a lower level of IQ compared with the rest of the population.	2.39 (.99)	5.1	10.1	37.4	35.4	12.1	2.55 (.86)	1.0	6.1	45.5	32.3	15.2

Affective Attitude Items

	Arson Conviction Condition								Sexual Conviction Condition							
	M (SD)	0 Completely Agree	1	2	3	4	5	6 Completely disagree	M (SD)	0 Completely Agree	1	2	3	4	5	6 Completely disagree
Fear	3.25 (1.48)	2.0	6.1	31.3	16.2	21.2	16.2	7.1	2.19 (1.73)	17.2	20.2	32.3	7.1	8.1	10.1	5.1
Anger	2.94 (1.48)	5.1	10.1	26.3	24.2	17.2	13.1	4.0	1.37 (1.23)	25.3	35.4	26.3	6.1	5.1	1.0	1.0
Worried	2.59 (1.35)	3.0	17.2	36.4	17.2	15.2	10.1	1.0	2.05 (1.47)	15.2	22.2	30.3	16.2	9.1	5.1	2.0
Upset	3.01 (1.40)	3.0	9.1	28.3	22.2	22.2	11.1	4.0	1.95 (1.35)	11.1	32.3	28.3	12.1	12.1	3.0	1.0
Confused	3.20 (1.68)	4.0	12.1	20.2	25.3	12.1	14.1	12.1	3.34 (1.70)	7.1	5.1	18.2	27.3	16.2	11.1	15.2
Pity	3.40 (1.67)	3.0	9.1	25.3	13.1	17.2	21.2	11.1	3.43 (1.62)	2.0	7.1	26.3	19.2	14.1	18.2	13.1

Behavioural Attitude Items

	Arson Conviction Condition						Sexual Conviction Condition					
	M (SD)	1 Most definitely not	2	3	4	5 Most definitely	*M* (SD)	1 Most definitely not	2	3	4	5 Most definitely
Please rate whether or not you would accept someone with an arson/sexual offence conviction as:												
Your neighbour	2.85 (1.14)	12.1	31.3	21.2	30.3	5.1	2.07 (.92)	29.3	43.4	18.2	9.1	0.0
A colleague at work	3.42 (1.06)	7.1	13.1	19.2	51.5	9.1	2.36 (1.05)	22.2	38.4	22.2	15.2	2.0
Your boss	2.94 (1.20)	15.2	24.2	17.2	38.4	5.1	1.77 (.89)	48.5	30.3	15.2	5.1	0.0
An acquaintance	3.07 (1.13)	10.1	23.2	22.2	38.4	6.1	2.22 (1.06)	29.3	36.4	17.2	17.2	0.0
A member in your church/sports club/community group	3.34 (1.07)	7.1	15.2	23.2	45.5	9.1	2.51 (1.22)	28.3	23.2	20.2	26.3	2.0
A close friend	2.89 (1.35)	20.2	23.2	17.2	26.3	13.1	1.90 (1.04)	46.5	28.3	15.2	9.1	1.0
A partner in marriage/civil union	2.43 (1.32)	32.3	23.2	23.2	11.1	10.1	1.46 (.76)	66.7	23.2	7.1	3.0	0.0
A son/daughter-in-law	2.79 (1.23)	20.2	20.2	27.3	25.3	7.1	1.99 (1.02)	41.4	27.3	23.2	7.1	1.0
Please rate whether or not you would be willing to…someone with an arson/sexual offence conviction												
Employ	2.65 (1.06)	16.2	29.3	30.3	22.2	2.0	2.24 (.98)	27.3	32.3	29.3	11.1	0.0
Accept onto an educational course	3.63 (1.08)	7.1	8.1	17.2	50.5	17.2	3.21 (1.12)	12.1	11.1	26.3	44.4	6.1
Rent a house/apartment to	2.16 (1.07)	33.3	32.3	20.2	13.1	1.0	2.46 (1.28)	32.3	21.2	18.2	24.2	4.0
Treat the same as everyone else.	3.20 (1.12)	8.1	21.2	21.2	41.4	8.1	2.71 (1.02)	11.1	34.3	30.3	21.2	3.0
Stay away from(R)	3.03 (1.09)	5.1	32.3	27.3	25.3	10.1	3.78 (1.06)	4.0	11.1	11.1	50.5	23.2
Be on guard around(R)	3.29 (1.09)	3.0	24.2	28.3	29.3	15.2	3.85 (1.01)	2.0	10.1	17.2	42.4	28.3