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Exploring the Information Needs and Seeking Behaviours of Adult Male Prisoners in Scotland

By

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Declaration

This thesis is the result of the author's original research. It has been composed by the author and has not been previously submitted for examination which has led to the award of a degree.

Previously Published Work

Parts of the research contained in this thesis have been published in the following works:

- Canning, C. and Buchanan, S. (2021) 'Exploring the rehabilitative role of the prison library: addressing sensitive information needs via cultural activities', In Garner, J. (Ed) *Exploring the Roles and Practices of Libraries in Prisons: International Perspectives* (pp. 11-37). Advances in Librarianship, vol. 49, Bingley: Emerald Publishing Limited.

Signed: Cheryl Canning

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Dedication

This thesis is dedicated to the memory of my grandparents who sadly passed away before they could see its completion. Thank you for your unconditional love, unyielding support, and for helping me to grow into someone strong enough to always see things through to the end, no matter how difficult.

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I would like to begin by thanking my supervisor, Professor Steven Buchanan, for his feedback and guidance which were vital in enabling me to complete this thesis. This included challenging my interpretations of collected data, directing me towards relevant literature and topics of interest, offering constructive critique of my writing, expanding my academic network by introducing me to colleagues at the University of Stirling and providing support during difficult times.

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I would like to end by acknowledging the truly outstanding support of my husband, Douglas, whose love, patience, and genuine interest in my research has made my PhD an overwhelmingly positive experience. After spending five years listening to me talk at length about prisoners' information needs and behaviours, I have no doubt that he could now write his own thesis on the topic.

Abstract

This study explored the information needs and seeking behaviours of prisoners via interviews with twenty-four adult male prisoners at HMP Shotts, a maximum-security prison in Scotland. Participants sought information on a variety of topics, with a clear preference for interpersonal sources who were considered trustworthy and/or possessed lived experience of imprisonment. The meeting of prisoners' information needs was inhibited by physical and security-related barriers expected in prisons, but also cognitive and affective issues (e.g. low self-esteem, distrust, and fear of stigma) and stress-coping issues (e.g. suppression). A range of contextual influencing factors, particularly hypermasculine social norms, shaped prisoners' behaviours in response to sensitive information needs relating to mental health, relationships, and learning issues. Prisoners frequently employed self-protective information behaviours, including *secrecy* and *deception*, to shield themselves from the potential negative consequences of sensitive needs being discovered by others (e.g. stigma); often leaving such needs unmet to the detriment of their mental health, relationships, and rehabilitation.

Findings contribute to our understanding of prisoners' information behaviour, particularly the relatively understudied adult male demographic who account for the vast majority of the prisoner population worldwide (World Prison Brief, 2021). Findings offer new insight into key theoretical concepts drawn from Wilson (1997), Chatman (1996; 1999) and Taylor (1968) in the prison context, particularly the relationship between stress, self-protective information behaviours, and the recognition and articulation of needs. Importantly, findings present valuable further evidence to support existing assertions that prisoners live in information poverty (i.e. Canning and Buchanan, 2019; Chatman, 1999).

Further research is recommended to exploration of sensitive information needs and avenues to support the meeting of these, and practical recommendations include communication campaigns designed to raise prisoners' awareness of (and access to) mental health support services in prisons and expanding prisoners' access to technology such as mobile phones and the internet.

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Chapter 1: Introduction

1.1 Introduction

This chapter acts as an introduction to the research described in this thesis, beginning with an overview of the context and rationale of the research to introduce the reader to the rehabilitative role of prisons and experience of imprisonment and identify the existing level of understanding regarding prisoners' information needs and behaviours (*section 1.2*). Previous work involving the author that acted as pilot study for the doctoral research reported is then discussed (*section 1.3*). Research aims, objectives and research questions are then outlined (*section 1.4*), followed by initial overviews of the theoretical framework (*section 1.5*) and methodology of the study (*section 1.6*). The chapter finishes by outlining the structure of the thesis, chapter by chapter, to guide readers to potential specific areas of interest (*section 1.7*).

1.2 Research context and rationale

The perceived role of prisons worldwide has changed over time, shaped by political climates and shifting public attitudes, with the overarching emphasis moving from punishment to an increasing focus on rehabilitation (Cameron, 1983; Coyle, 1991; Raynor and Robinson, 2009; Smartt, 2006). In the context of imprisonment, rehabilitation can be understood as a process which begins in the prison and continues after release, causing fundamental changes to the behaviour and attitudes of those who commit crimes, for the greater benefit of society, with the primary goal of reducing reoffence rates (Goffman, 1961; Ministry of Justice, 2010; Raynor and Robinson, 2009). However, the success of rehabilitative interventions often rests on adequate and appropriate information being available and accessible to prisoners (Egglestone *et al.*, 2018; Ministry of Justice, 2011; Scottish Government, 2015), and it is acknowledged that tailoring information provision to prisoners' needs may be difficult due to various psychological and environmental issues which influence information interactions; e.g. the potential stigma associated with exposing vulnerabilities to others in hypermasculine environments (Courtenay and Sabo, 2001; Crewe, 2012; Goffman, 1963; Holmberg, 2007; Kupers, 2001; Messerschmidt, 2018; Mosher and Tomkins, 1988). In addition, another issue exists in the fact that many rehabilitative interventions rely on the assumption that it is known *what* information prisoners need, *how* to deliver this information, and *when* to supply it. More importantly, the question of whether prisoners themselves can identify their own information needs persists, as prisoners may not know they require information to resolve a problem, may be aware of an information need but

unable to define precisely what it is, or may not wish to admit needs to themselves or others for a variety of reasons. Evidence suggests that prisoners often cope with the stressful experience of imprisonment through maladaptive coping strategies which do not involve seeking information and/or support to address issues (Campbell, 2005; Chatman, 1999; Clemmer, 1940; Dye, 2010; Goffman, 1961; Liebling, 2012; Sykes, 1958; Zamble and Porporino, 1988), and the inability and/or reluctance to confront problems and seek information to resolve these is recognised as having the potential to contribute to negative psychological states (e.g. low self-esteem), which are considered contrary to the rehabilitation process (Day, 2009). It is therefore crucial that prisoners are supported to address their information needs for reasons not only relating to their rehabilitation, but also their general wellbeing. However, to do so, it is first necessary to gain a better understanding of prisoners' information needs and the various issues which influence the meeting of these.

A review of existing related work indicates that prisoners have information needs largely similar to those of the general public (e.g. relating to education, health, recreation, etc.), but also experience specific information needs relating to the daily prison regime and coping with imprisonment (Campbell, 2005; Canning and Buchanan, 2019; Emasealu and Popoola, 2016; Nacro, 2009; Rafedzi and Abrizah, 2014). A range of information sources exist in the prison environment, but most prisoners exhibit a preference for interpersonal sources, and this is often attributed to inadequate information services. For example, prison libraries are often viewed as failing to meet prisoners' information needs (Bajić, 2015; Emasealu and Popoola, 2016; Eze, 2014; Omagbemi and Odunewu, 2008; Sambo *et al.*, 2017; Tarzaan *et al.*, 2015). There is evidence of complex access barriers and internalised behavioural barriers impacting upon the meeting of prisoners' information needs; the former influenced by custodial policy and controls, the latter by restrictive social structures and norms, and issues of trust (Campbell, 2005; Canning and Buchanan, 2019; Chatman, 1999; Stevens, 1994). Overall, evidence indicates that prisoners often exist in information-impoverished circumstances, with many of their information needs reported as frequently unmet (Chatman, 1999; Nacro, 2009; Stevens, 1994); particularly those of a sensitive nature relating to emotional topics and coping with imprisonment (Canning and Buchanan, 2019). However, despite often identifying issues of unmet need, few studies provide guidance on interventions which might help prisoners address their information needs, with many simply recommending improvement of prison library services with little or no guidance as to how to achieve this (e.g. Bajić, 2015; Emasealu and Popoola, 2016; Omagbemi and Odunewu, 2008; Sambo *et al.*, 2017; Tarzaan *et al.*, 2015). Further research in this area is therefore required to better understand the issues which influence the meeting of prisoners' information needs, and to explore how prisoners might be better supported to address their information needs.

1.3 Previous relevant research by the author and relationship to this doctoral research

In 2016, the researcher undertook an initial study exploring the information behaviours of prisoners in Scotland as part of MSc research which was subsequently published in 2019 under the title "The Information Behaviours of Maximum-Security Prisoners: Insights into Self-protective Behaviours and Unmet Needs" in Emerald's 'Journal of Documentation' (see Canning and Buchanan, 2019). This small study sought to better understand the information needs and behaviours of prisoners in order to inform prison information service design as well as education and rehabilitation programmes. As such, the study set out to address three key research questions:

1. What are the information needs of prisoners?
2. What information sources do prisoners use, and why?
3. What issues influence prisoners' information behaviours?

Due to a lack of guiding research, this prior work took an exploratory approach incorporating qualitative methods. Data collection was conducted at one maximum-security prison in Scotland, and methods involved individual (semi-structured) interviews with twelve prisoners and two prison officers, and a (semi-structured) group interview with four members of prison learning centre staff. To explore existing assertions that prisoners' information needs are often unmet, the theoretical framework was provided via Chatman's (1996) concepts of information poverty. Data analysis incorporated both deductive and inductive elements; deductive where coding was guided by concepts drawn from Chatman (e.g. secrecy and deception) and inductive where codes were constructed as patterns and themes emerged from iterative analysis of the data set (e.g. the influence of affective states on prisoners' information behaviour). Braun and Clarke's (2006) approach to thematic analysis was adopted; i.e. data transcription and familiarisation, initial code generation, collating codes into themes, reviewing themes, refining themes and producing themes.

This prior work reported that prisoners experience a range of information needs relating to their day-to-day life (e.g. prison regime, physical health, and education), including several sensitive needs relating to emotional topics and coping with imprisonment which appeared often unmet. A preference for interpersonal sources of information was found and attributed to both enduring natural preferences for human communication and issues inhibiting access to other sources in the prison context. A range of issues which appear to influence prisoners' information behaviour are identified, including issues relating to self-esteem, stigma, trust, misinformation and disinformation and practical access. Findings suggest that social norms and issues of affect (e.g. feelings of weakness, inability to cope, and emotional trauma) play a significant role in inhibiting prisoners' action in response to information needs. This was evident in the apparent degree of risk associated with interaction with

interpersonal sources of information and prisoners' subsequent engagement in self-protective behaviours such as secrecy and deception which, importantly, often left needs unmet. Unmet information needs of an emotional nature (i.e. relating to emotional topics and coping with imprisonment) appeared to be particularly problematic; with evidence suggesting that such needs, if let unmet, could compound feelings of uncertainty in the already stressful context of imprisonment and potentially also exacerbate feelings of emotional distress during periods of isolation. Findings of this previous work is also discussed in chapter 2 of the thesis as part of a literature review of prior research relevant to the thesis and topic of prisoners' information behaviours.

Whilst findings of this previous work provided several insights into the information needs, seeking preferences, and issues influencing the information behaviours of this understudied demographic (adult male prisoners), significant limitations of the study relate to the small number of prisoner participants (12) and limited duration of the study (fieldwork was conducted across a span of three weeks due to time constraints of MSc dissertation). In addition, also evident was a need for further research to yield greater depth of insight into some of the significant emergent themes. For example, the prior work presents limited evidence of sensitive information needs which are difficult to address due to various social and affective issues and appear an important area for further research given consequences for prisoners' wellbeing and rehabilitation. Also, there is some evidence suggesting recognition issues but again, this is limited and requires further research. In light of this, the prior work concludes by recommending further research to evaluate findings in relation to identified needs, factors influencing engagement with sources, and issues influencing information behaviours. Also highlighted is the specific need for further research exploring prisoners' unmet needs (particularly those of an emotional nature) and potential methods for supporting prisoners to recognise and address their information needs.

Following this study, the researcher themselves then wanted to explore this whole area more in-depth to address the limitations of the prior work and clear need for further research into key findings of interest to the LIS (library and information science) field which were only evidenced to a limited degree (in particular, the sensitive context of information need and issue of unmet needs). One pragmatic avenue to conducting further research was identified as doctoral study. As such, the researcher submitted a research proposal to the University of Strathclyde outlining the need for expansion upon findings of the MSc study and further research in this area. This proposal was accepted by the University of Strathclyde and granted funding by the Scottish Graduate School for Humanities with doctoral studies scheduled to begin October 2017. For the purposes of clarifying the relationship between the researcher's prior work and doctoral research, it can be considered that while the prior work was not conducted with the intent of acting as a pilot study, it was recognised that this earlier

work offered a suitable theoretical and methodological basis upon which to expand and can be considered a pilot study for the doctoral research. This is the reason for various similarities in both studies in terms of research questions, mid-range theories employed, sample, methods, and findings. The influence of the pilot study on the research design of the doctoral research is discussed further in chapter 3. The distinct contribution of the doctoral research, including in relation to the pilot study, is discussed in chapter 6.

1.4 Aim, objectives, and research questions

This study aims to better understand the information needs and seeking behaviours of prisoners, and to identify potential ways to support prisoners to address their information needs and consequently, improve their chances of successful rehabilitation. In view of this, this study seeks to address the following two research objectives:

1. To advance our understanding of prisoners' information needs and seeking behaviours.
2. To identify opportunities to better support prisoners to address their information needs.

To address the above objectives, four research questions are identified:

1. What are the information needs of prisoners?
2. What sources of information do prisoners use and why?
3. What issues influence the meeting of prisoners' information needs?
4. How can prisoners be supported to address their information needs?

1.5 Theoretical framework

The theoretical framework of this study draws upon several models and theories of human information behaviour to guide analysis and interpretation of data: Wilson's (1997) Revised General Model of Information behaviour, Chatman's (1996; 1999) theories of information poverty and life in the round, and Taylor's (1968) theory of question-negotiation. These are discussed below (chapter 2 presents a more detailed discussion of the theoretical framework).

Wilson's (1997) 'Revised General Model of Information Behaviour' attempts to present the complex relationship between contextual and cognitive factors which influence an individual's information behaviour. Wilson proposes a range of intervening variables (i.e. psychological, demographic, role-related or interpersonal, environmental, and source characteristics) and activating mechanisms (i.e. stress/coping, risk/reward, and self-efficacy) which influence information behaviour, and describes

four approaches to information seeking, including passive attention, passive search, active search, and ongoing search. This study adopts Wilson's model as a macro framework, within which further theories of information (such as those discussed below) can be nested as intended by Wilson (Wilson, 1999), for understanding the various contextual and cognitive factors which influence prisoners' information behaviours. This study draws upon a range of concepts and theories nested within Wilson's model (e.g. stress/coping) to explore factors which influence recognition and articulation of information needs, selection of sources, and motivation to seek information in the prison context.

Chatman's (1996) theory of 'information poverty' describes an impoverished information state as one in which people feel that they are helpless, are influenced by outsiders who withhold privileged access to information, adopt self-protective behaviours (e.g. secrecy and deception) in response to social norms, do not trust the ability of others to provide useful information, withhold their true problems in the belief that negative consequences outweigh benefits, and selectively receive new information. Chatman (1999) explores insider/outsider theories in the prison context in her theory of 'life in the round', which includes four key concepts which attempt to explain how prisoners' information behaviour is shaped by their environment: small worlds (localised like-minded communities); social norms (codes of behaviour); worldviews (collective beliefs); and social types (social roles). This study draws upon concepts of Chatman's (1996; 1999) theories of information poverty and life in the round to explore the contextual influence of the prison life on prisoners' information behaviour.

Taylor's (1968) 'question-negotiation' theory proposes that information needs can exist at four levels, ranging from the initial 'visceral' feeling associated with an information need, to the 'conscious' acknowledgement of the existence of an information need, to the 'formalized' verbal description of the need, to the 'compromised' expression of the need in system or person terms (p. 182). This study draws upon Taylor's four levels of need to explore factors which influence recognition and articulation of information needs and to identify areas where prisoners may benefit from additional support in understanding, expressing, and addressing their information needs.

Whilst guided by the above theoretical framework this study also incorporated an inductive element which is discussed in Chapter 3.

1.6 Methodology

Given the subject matter of the research (i.e. the information needs and seeking behaviours of prisoners) and aims and objectives of the study, it was considered important to obtain data which would provide an in-depth understanding of prisoners' personal experiences of information. As such, qualitative data collection techniques were utilized. To obtain detailed qualitative data, the research

design was developed with an emphasis on methods which would support the building of trust with participants (conducive to discussion of a wide range of needs potentially encompassing sensitive topics). This involved one-to-one repeat (where possible 2-3) interviews with 24 adult male prisoners from one Scottish prison across a period of 12 months. Approval was granted to conduct the study at HMP Shotts which holds approximately 500 adult male prisoners serving sentences of four years or more (Scottish Prison Service, 2021a). A series of focus groups with small groups of prisoners was initially considered as a means of validating and building upon findings from interviews, but it was felt this might detrimentally impact recruitment as potential interviewees may not participate with the knowledge that interview data (albeit anonymised) might be discussed with other prisoners in a group setting. Additionally, it was recognised that participant anonymity could be difficult to ensure given that even small details may be telling in this small world context. Chapter 3 presents a more detailed discussion of the methodology of the doctoral research.

1.7 Structure of the thesis

The following outline provides an overview of the structure of this thesis.

Chapter 1 introduces the doctoral work, presenting an overview of the research context and rationale, research aims, objectives, and questions, theoretical framework, methodological approach, and structure of the thesis. Also included is a discussion of previous relevant research by the author and the relationship of this prior work to this doctoral research.

Chapter 2 presents a review of literature, including an overview of the research context (i.e. prison), discussion of relevant concepts, theories, and models of human information behaviour (particularly those which constitute the theoretical framework), and review of the existing level of work on prisoners' information needs and seeking behaviours.

Chapter 3 describes the methodological approach of the study, including the influence of the pilot study on the doctoral research design, statement of the aim, objectives and research questions, followed by discussion of the research paradigm, theoretical framework, research design, data sample and recruitment methods, data collection methods, data analysis process, ethical considerations, risk analysis and mitigation plans, fieldwork observations, problems, and adaptations.

Chapter 4 presents findings of the study, including an overview of participant demographics, followed by presentation of evidence identifying prisoners' information needs, sources of information used by prisoners and why, and issues which influence the meeting of prisoners' information needs.

Chapter 5 presents a discussion of the findings of the study (structured by research questions), including the information needs of prisoners, sources of information used by prisoners and why, and issues influencing the meeting of prisoners' information needs.

Chapter 6 concludes the thesis by summarising the research findings, outlining key contributions, identifying limitations of the study, and making recommendations for future research and practical action/policy/change. The researcher then reflects on the PhD journey and presents final conclusions of the study.

1.8 Chapter summary

This chapter introduced the reader to the research described in this thesis, including an overview of the research context (i.e. prison) and rationale of the study (i.e. the need for further research into prisoners' information needs and behaviours given the current limited understanding in this area). The researcher's previous work on the information behaviours of prisoners is discussed including the relationship of this prior work to this doctoral research. Aims, objectives, and research questions of the study are presented, followed by an overview of the theoretical framework, and methodological approach. The thesis structure is also outlined to guide readers to potential specific areas of interest. The next chapter presents an in-depth overview of the prison context, exploration of concepts, theories, and models of human information behaviour, and evaluation of the existing level of research into prisoners' information needs and seeking behaviours.

Chapter 2: Literature review

2.1 Introduction

This chapter presents a review of literature relevant to the research, beginning with an overview of the literature review process (*section 2.2*). This is followed by discussion of the research context of the study, including the rehabilitative role of the prison, the prisoner experience, and methods for coping with imprisonment (*section 2.3*). Following this, theories and models of human information behaviour are discussed, with particular attention paid to those which constitute the theoretical framework of the study (*section 2.4*). The chapter concludes with an overview of related work to determine the current level of research on prisoners' information needs and seeking behaviours (*section 2.5*).

2.2 Literature review process

The aim of the literature review is "to establish what is already known about the topic and to frame the review in such a way that it can act as a background and justification for your investigation" (Bryman, 2016, p. 90). A systematic review of literature was conducted to determine the existing level of research into prisoners' information needs and seeking behaviours. The literature review process, guided by Lim's (2013) Literature Review Process using Mendeley and Synthesis Matrix (with the removal of Mendeley elements irrelevant to this study), is illustrated in Figure 1 below.

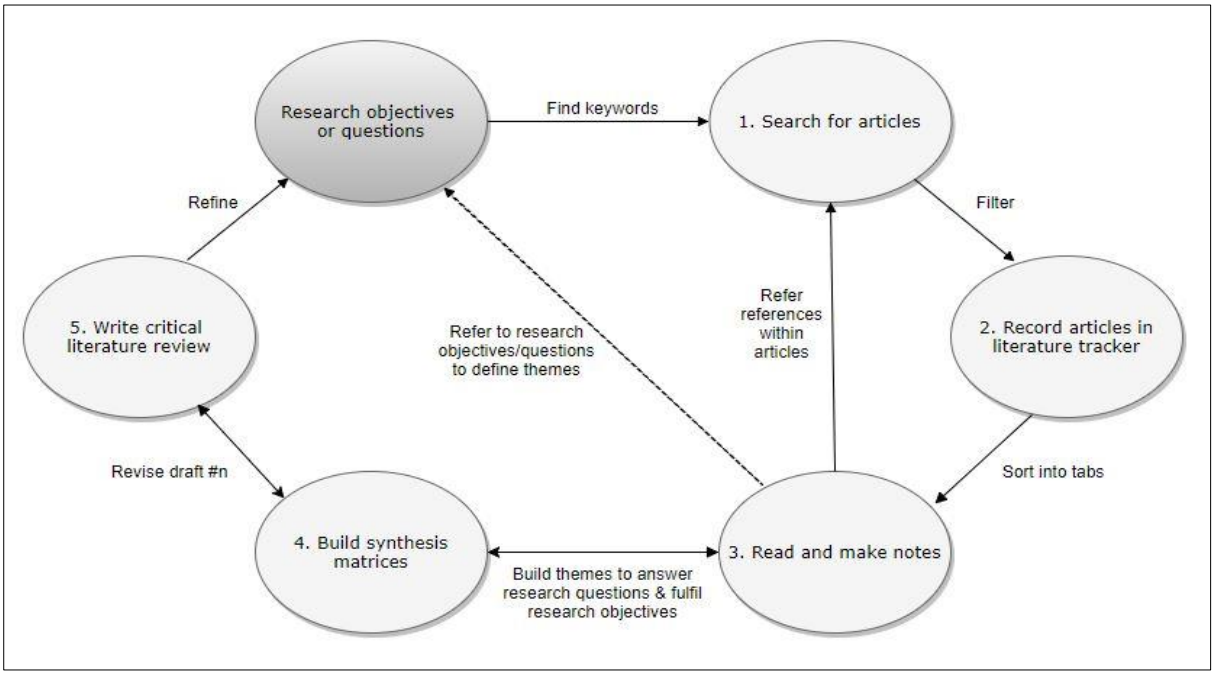

Figure 1 Literature review process adapted from Lim (2013)

Prior to initiating the search, the research problem was examined to identify key terms (e.g. information need, prisoners, prison education). Derivatives of these (e.g. alternative plural, tense, etc.) and related concepts (e.g. synonyms, dialect variations, etc.) were used in a variety of combinations to ensure relevant documents were not omitted from results. For example, terms more commonly used in the United States such as “jail” and “convict” were included in searches.

The search strategy involved the use of several specialist databases; the primary databases used were LISA (Library and Information Science Abstracts), JSTOR, Taylor & Francis Online, and Project MUSE which were found to yield the most relevant results, however, other databases were also utilised in the search (e.g. EBSCO, Web of Science, and SCOPUS) but produced fewer results (this is not an exhaustive list as other databases were search but were found to produce results which have already been located and/or to produce no relevant results and as such, were not recorded). Database searching mainly produced literature pertaining to academic research, but other search strategies resulted in the occurrence of more bibliographic literature. For example, the majority of literature relating to the daily operation of prisons, prison libraries, or prison health services; often written by those involved in the provision of these services (e.g. prison employees, charitable organisations, and local authorities) was retrieved using web-based search engines. However, Bryman (2016) warns that search engines “merely find sites; they do not evaluate them” (p. 107) and this search strategy therefore required additional time and effort as the researcher had to scrutinise the relevance, potential bias, and quality of results, as well as considering the motives for publication online. The researcher also consulted relevant publications by the Scottish Prison Service and Scottish Government (often available in electronic format directly from organisations’ websites) to gather background and demographic data about the specific prison context of this study, including policies defining operational standards, statistical reports, and strategic plans. Another effective search strategy was to examine work referenced in relevant documents, given that this literature was liable to be of some relevance to the current study. This resulted in a rich and diverse range of literature being discovered as many documents which did not appear immediately relevant (e.g. due to obscure titles or unfamiliar terminology) were identified as relevant to the current study.

Several challenges were experienced during the literature review process. For example, while initially strict search parameters were adopted, due to a lack of results it was necessary to adjust these to find relevant literature; e.g. in a search conducted using the LISA database, the search input ‘information behaviour AND prisoner’ produced 274 results, but narrowing the geographic parameter to UK studies produced only 5 results (none of which were felt to be relevant). Narrowing the original 274 results by refining the date of publication parameter to 2015 onwards was more successful, with 50 results produced (with 16 of these felt to be relevant). This demonstrated from an early stage the lack of

literature regarding prisoner information behaviour studies in the UK context and in response to this, subsequent search results were more adaptively refined by parameters (such as language and date published) depending on the initial results produced. Other difficulties were encountered when searching for specific terms, such as 'prisoners' and 'information', as the majority of results were found to focus predominantly on the prison education context; to negate this, Boolean operators were employed (e.g. prisoners AND information NOT education).

Documents gathered during the literature review process were recorded in an Excel spreadsheet, with detail recorded under the following headings: author, year, title, source type, context, theoretical framework, and main findings. This enabled tracking of documents to prevent duplication of effort, quick searching within the collection for specific authors, themes, and methodologies. This also made the process of identifying knowledge gaps, suitable methodological approaches, and construction of reference data relatively straight-forward. Using this spreadsheet, findings from relevant literature were synthesised to identify emerging connections between existing work; e.g. identifying patterns between prisoners' information behaviours and their coping strategies in the prison context. These connections were used to create a start list for the coding of data and to establish the theoretical framework of the current study (which is discussed later in this chapter and again in chapter 3). This review process was iterative, with any newly identified themes resulting from the literature review used to revisit research questions, updating search terminology, and beginning a new search cycle.

2.3 The prison context

This section presents a discussion of the research context of the study (i.e. prisons), including the rehabilitative role of prison, the prisoner experience and psychological impact of the physical and cognitive restrictions of prison life, and the strategies employed by prisoners in attempts to cope with the stress of their imprisonment. These are discussed in the sections below.

2.3.1 The rehabilitative role of prison

The perceived role of the prison has changed over time, shaped by political climates and shifting public attitudes, progressing from a place for punishment to a place in which individuals convicted of crimes are encouraged to undergo positive and meaningful psychological and behavioural change through a process described as 'rehabilitation' (Cameron, 1983; Coyle, 1991; Raynor and Robinson, 2009; Smartt, 2006). For the purposes of this study, rehabilitation is viewed as a process which begins in prison and continues after release, seeking to effect fundamental changes in the behaviour and attitudes of those who commit crimes for the greater benefit of society (by reducing the risk of reoffending). Reflecting the increasing emphasis on the rehabilitative role of prison over the past

century, the United Nation (1966) states, “The penitentiary system shall comprise treatment of prisoners the essential aim of which shall be their reformation and social rehabilitation” (UN General Assembly, 1966, article 10:3). Advocating for the rehabilitative role of prisons in the United Kingdom, McGuire (1995, p. xi) states:

> A principal goal of working with offenders should be to reduce the likelihood that their illegal or anti-social behaviour will be repeated. This is, arguably at least, the single most highly valued service that could be delivered to victims of crime.

A similar investment in rehabilitation is evident in the Scottish context, with the Scottish Prison Service (2021b) pledging to, “develop an improved focus and investment in rehabilitation and reintegration services that help people in our care to fulfil their potential as responsible citizens” (n. p). One possible reason for the growing emphasis on rehabilitation in Scotland may be the consistently high reoffending rates, with almost a third of persons convicted of crime(s) reconvicted within one year of release (Scottish Government, 2021). It is important to appreciate that reconviction rates may not truly represent re-offence rates, given that many crimes go unreported and crimes punished by fines are not included in these figures; meaning that the true rate of reoffending among persons convicted of crime(s) may be significantly higher. Key factors attributed to reoffending include weak social bonds, low self-efficacy, substance misuse, poor mental health, homelessness, and lack of employment (Graham, 2016; Healy, 2010; Shapland *et al.*, 2016). Some of these issues are attributed to secondary consequences of educational deficits; for example, lack of qualifications hindering job acquisition or low literacy level preventing completion of housing forms (Lehmann, 1999; Ministry of Justice, 2010, Nuttall *et al.*, 1998). However, as Raynor and Robinson (2009, p. 6) note:

> Reflecting these assumptions about the causes of offending, [rehabilitation] is principally concerned with effecting change in offenders themselves, rather than in their social, economic or physical situation (the latter may be seen as desirable, but more difficult to achieve, or requiring large-scale social action beyond the scope of ‘correctional agencies’).

The term rehabilitation has been equated with the concept of reform, the educational and contemplative techniques used to effect positive behavioural and cognitive change (Hudson, 2003), and can therefore be viewed as a learning process which encourages self-reflection to trigger recognition of and changes to problematic behaviours and cognitions. With education at the core of many UK rehabilitative initiatives (Ellison *et al.*, 2017), effective information access and support are recognised as significant factors contributing to successful rehabilitation (Egglestone *et al.*, 2018; Ministry of Justice, 2011; Scottish Government, 2015). For example, the Scottish Prison Service (2013)

pledged to support rehabilitation and encourage desistance by offering "improved information and education for offenders" through greater investment in behavioural courses, educational classes, and preparation for release services (p. 58). Evidence demonstrates lower levels of reoffending among those who attend such programmes (Scottish Government, 2015), however, a recent prisoner survey found that only 35% of prisoners reported attending behavioural courses, 58% reported attending educational classes, and 28% reported accessing services associated with preparation for release (Carnie and Broderick, 2019, pp. 4-5). Therefore, it is clear that a significant proportion of prisoners do not actively engage with these services. Furthermore, this data represents prisoners who interacted to *any* degree with services and may not reflect meaningful engagement but more passive participatory interactions, such as prisoners attending courses simply to 'tick a box' required for release.

Potential reasons for prisoners' disengagement with rehabilitation courses may be linked to their reluctance to engage with activities which directly confront problematic attitudes and behaviours (McGuire, 2002; Patterson and Forgatch, 1985) and/or insufficient levels of motivation (McNeill and Whyte, 2007). Apex Scotland (2017), which supports individuals to move away from criminal behaviour, highlights the importance of motivation in desistance from crime (p. 12):

> The greatest single barrier to moving away from offending patterns of behaviour is a lack of belief that anything else is possible or desirable. If there is no expectation of personal success then the individual operates in a very narrow field of ambition. There is great truth in the phrase 'If you aim at nothing you will always hit it'.

Another factor which may explain this disengagement is the potential for prisoners to overlook the relevance and value of these courses to their situations; this may be especially true for those who do not view their offending behaviour as problematic and engage in denial (Miller, 2012). Ward *et al.* (2004) explain that psychological "readiness" is required for prisoners to meaningfully participate in the rehabilitation process and that this can be viewed as occurring in three cognitive stages (p. 655):

> First, the offender must evaluate their current behaviour as a problem. Second, the offenders must seek help for the problematic behaviour. Third, the offenders must have competencies to allow them to participate in the therapeutic process.

Consequently, the rehabilitative process can be viewed as comprising of 3 stages; beginning with the individual recognising a problem with their behaviour, followed by the engagement in a re-education process whereby they come to better understand their problematic behaviour, and finally, learn how to address this. Only when these stages are complete can the prisoner be considered 'rehabilitated' (though the extent of this will vary by person). This process can be simplified into the following three

steps: recognition → re-education → rehabilitation. The specific term 're-education' is adopted here as it is recognised that the process of rehabilitation is one which is predominantly concerned with altering *existing* problematic beliefs, attitudes, and values which motivate criminal behaviour, as Lewin and Grabbe (1945, p. 53) explain:

> The need for re-education arises when an individual or group is out of step with society at large. If the individual has taken to alcoholism, for instance, or has become a criminal, the process of re-education attempts to lead him back to the values and conduct which are in tune with the society in which he lives.

It is also important to appreciate that education does not refer solely to formal educational programmes designed to furnish prisoners with practical skills and qualifications, but also educational processes which are informal and self-directed. In examining adult education (or andragogy), Knowles (1975, p. 18) describes this type of learning as:

> A process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes.

Such learning allows prisoners to better understand their own thought patterns, enabling meaningful reflection on past actions (Tillema, 2000), and this requires the acquisition of new knowledge established through interactions with information (Barron *et al.*, 2015; Breedlove *et al.*, 2007; Eysenck and Keane, 2010; Rudy, 2008). As such, the ability to recognise problems as a need for information, to obtain information required to resolve needs, and to interpret information to construct new knowledge is crucial to the success of rehabilitation. There is therefore a clear need to understand prisoners' information behaviours in order to identify any issues and areas where prisoners may require additional support to address information needs which constitute an important step on their rehabilitative journey. However, it is first important to understand how the environmental and cultural setting of daily prison life and prisoners' subsequent lived experience of imprisonment influences their behaviours. This is discussed in the next section.

2.3.2 The prisoner experience

Influential twentieth-century sociologist Goffman (1961, p. 11) describes prison as an example of a 'total institution' which he defines as:

> A place of residence and work where a large number of life-situated individuals, cut off from the wider society for an appreciable period of time, together lead an enclosed, formally administered round of life.

He goes on to explain that the fundamental role of this type of institution is to ensure the wider community's safety by removing the potential source of danger (i.e. criminal), which leaves "the welfare of the persons thus sequestered not the immediate issue" (1961, p. 16). Sykes (1958) describes the prison as characterised by "a Kafka-like atmosphere compounded of naked electric lights, echoing corridors, walls encrusted with paint of decades, and the stale air of rooms shut up too long" (p. 7). Hancock and Jewkes (2011) note that small steps have been taken in recent decades to improve this environment, explaining, "Prison design has increasingly come to facilitate and encourage communal interactions and contemporary cell design… lessening the pains of imprisonment" (p. 627). However, while attempts are made to ensure that the conditions in which prisoners live are at the very least humane, psychological harm cannot necessarily be avoided in places which deprive individuals of their freedom and independence (Crewe, 2012). For example, Mann and Hendrick (2015) argue, "Prisons are places of pain. They contain large numbers of troubled individuals, living together in close proximity, who lack autonomy over the smallest things in their lives" (p. 3). Highlighting how improvements to the prison environment itself may not reprieve prisoners of the pains associated with their helplessness and lack of freedom, Gravett (1999, p. 1) comments:

> Inmates feel acutely their sense of loss: the loss of freedom and separation from loved ones. They are conscious of a complete lack of control over their lives, of becoming totally dependent on others.

Building on this general prisoner profile, Liebling (1994) comments, "Prisoners talk, when given an opportunity, of frustration, loneliness, boredom, anger, self-contempt, personal agony, and a desperate seeking for relief" (p. 8). Goffman (1961) explains that prisoners often feel that are "inferior, weak, blameworthy, and guilty" as a result of their dependency on staff (p. 18), suffer from "chronic anxiety" as a result of the ever-present risk of violence and punishment (p. 46), and are often "stigmatized" by others both inside and outside of the prison (p. 71). He goes on to explain that prisoners are systematically stripped of their independence and self-efficacy by the strict routines, panoptic surveillance, and process of depersonalization which occurs in the prison. This is confirmed by Campbell (2005) who found that prisoners were often referred to in terms of their "passiveness" or "powerlessness" (p. 20). However, Sabo (2001) notes that individuals who are imprisoned do not necessarily suffer a reduction in self-efficacy as a result of their imprisonment, but may in fact also enter prison with an existing a sense of helplessness (p. 167):

> Among prisoners, there are a number of factors that undermine a sense of control and self-efficacy. Many prisoners come from low-income and underclass backgrounds, where fatalism is often a way of life. Poverty and hard, unhealthy social conditions breed this fatalism and foster the belief that much of what happens in life is beyond an individual's control.

This sense of helplessness and low self-efficacy (exacerbated by the minimal agency permitted to prisoners within the prison) contributes to low levels of motivation and a lack of self-confidence, leaving prisoners an extremely dependant group (Campbell, 2005; Goffman, 1961; Sabo, 2001). Importantly, the negative emotional states associated with feelings of helplessness, shame, and inferiority are also recognise as being contrary to the rehabilitation process (Day, 2009).

Drawing on Sykes (1958), Goffman (1961) describes the prisoner experience as one that restores individuals to a child-like dependence which is "unnatural" (p. 45) and "can produce in the inmate the terror of feeling radically demoted in the age-grading system" (p. 47). It is understandable then why prisoners may feel a sense of inferiority and helplessness, only able to act under the authority of 'adult' figures in the prison system. Goffman (1961) explains that this dependency and associated sense of inferiority also breeds distrust between prisoner and staff groups (p. 18):

> Each grouping tends to conceive of the other in terms of narrow hostile stereotypes, staff often seeing inmates as bitter, secretive, and untrustworthy, while inmates often see staff as condescending, highhanded, and mean.

Within this socially stratified culture, informal hierarchies operate, with prisoners often conforming to a specific social type, each with their own set of privileges (Chatman, 1999). Bowker (1977) explains that in this "authoritarian" social structure "equality between peers is threatening to prisoners, so peer situations are usually resolved into relationships in which one man is subordinate to the other" (p. 35). While this hierarchy helps prisoners to locate themselves within the social system of the prison and to determine the appropriateness of their behaviour before acting (following the guidance of those higher up), it is can also cause problems. For example, it has been noted that men often appear reluctant to share or display 'feminine' emotions (e.g. fear, distress, or love) in hypermasculine environments, such as all-male prisons (Courtenay and Sabo, 2001; Crewe, 2012; Goffman, 1963; Holmberg, 2007; Kupers, 2001; Messerschmidt, 2018; Mosher and Tomkins, 1988). Messerschmidt (2018) discusses the pervasive influence of hypermasculinity (pp. 13-14):

> Hegemonic masculinities do not discriminate in terms of race, ethnicity, class, age, sexuality, and nationality, and hegemonic masculinities do not represent a certain type of man; instead, they personify and symbolize an unequal relationship between men and

> women, masculinity and femininity, and among masculinities that is widely dispersed and operates intimately and diffusely. And these copious hegemonic masculinities provide a conceptual framework that is materialized in the design of daily practices, interactions, and discourses.

Holmberg (2001) explains that the all-male prison has a magnifying effect on masculine traits which results in a "cult of masculinity" known of hypermasculinity (p. 89). Crewe (2012) similarly describes all-male prisons as frequently exhibiting a 'macho' or 'hypermasculine' culture in which an "important component of the inmate code is the injunction against showing weakness and vulnerability" and which encourages behaviours such as "emotional indifference and self-hardening […] aggression, homophobia, and misogyny" (p. 35). Courtenay and Sabo (2001) adopt a similar perspective, asserting that "many codes of 'manly' conduct require stoic denial of pain, physical dominance, and personal risk", and that acts such as "health promoting behaviour" such as seeking assistance for physical or mental health conditions (which can indicate weakness or vulnerability), can put prisoners' reputations amongst others at risk (p. 165). The issues associated with hypermasculinity in all-male prisons are numerous. For example, as previously discussed, hypermasculine culture disapproves of seeking assistance for mental and physical health issues which has obvious consequences for the prisoners who require such help. This emotionally restrictive culture which encourages prisoners to mask their true condition also makes measuring progress towards rehabilitation challenging (Skogstad *et al.*, 2006); for example, emotional distress may be considered 'appropriate' when a prisoner confronts his offending behaviour as this demonstrates remorse and reflection, but if he is reluctant to express this emotion openly, evidence of his rehabilitative progression is not visible and/or evident to others. However, Kupers (2001, p. 192) explains that adhering to socials norms within this culture of hypermasculinity may be necessary if prisoners are to survive and cope with their imprisonment:

> Male posturing in prison has a double edge relationship to mental health issues. On one hand, men's need to keep their cards close to their chests and refuse to disclose their needs and pains often prevents them from seeking the kind of mental health care that might help them do their time and come out of prison emotionally prepared to "go straight". On the other hand, it is actually very dangerous in prison to expose one's vulnerabilities; thus, men's tendency to refrain from expressing their feelings and inner experiences can serve to keep them out of certain kinds of trouble.

This 'trouble' can be understood as the various risks which prisoners face as a result of engaging in certain behaviours which are in contradiction to social norms. Lupton (2013) notes that 'risk' in everyday use is used almost exclusively to refer to a "threat, hazard, danger, or harm" which could befall an individual (p. 10), and explains that the numerous diverse perspectives regarding this concept

appear to fall broadly into two categories; i.e. defining risk as an objective term for describing the mathematical (often statistical) probability that a specific (in)action will result in a undesirable outcome, or as a more subjective term for describing an individual's perception of the likelihood and severity of an undesirable outcome following a specific (in)action based on their personal judgement and existing knowledge (p. 20). Reviewing and consolidating multiple definitions of risk across a range of scientific disciplines, Aven and Renn (2009) explain that risk can be understood as "uncertainty about and severity of the events and consequences (or outcomes) of an activity with respect to something that humans value" (p. 6). This perspective is considered suitable for the purposes of the current study given its recognition of uncertainty which features large within existing information behaviour research (Case and Given, 2016), the broad scope of entities which *something* valued by humans could refer to (e.g. their physical being, psychological state, possessions, relationships, etc.), and the inclusion of a human element of judgement (inferring that individual knowledge and context play a role in the interpretation of risk); considered important as this study is predominantly concerned with exploring prisoners' personal experiences of information as shaped by their everyday lived experience of life in prison.

Linking to considerations of risk is the concept of 'trust' (commonly associated with interpersonal interactions) which can be used to explain why information in contradiction to the social norms of the prison and associated with risks may or may not be shared between prisoners. Schilke *et al*. (2021) define trust as "the willingness of an entity (i.e., the trustor) to become vulnerable to another entity (i.e., the trustee)" and explain that "in taking this risk, the trustor presumes that the trustee will act in a way that is conducive to the trustor's welfare despite the trustee's actions being outside the trustor's control" (pp. 240-241). Ellis (2017) explains that violations of trust, particularly repeated violations involving negative outcomes such as violence, can result in individuals living life under a sense of foreboding and ever-present fear that others cannot be depended on (p. 130). In the context of prison, where risks are often perceived as high (particularly in relation to consequences such as stigma, bullying, and/or violence), it is understandable why prisoners may be unwilling to place their trust in others by sharing information which does not adhere to the social norms of the prison and therefore carries an element of risk. However, despite the prevalence of distrust within the prison context (Crewe and Bennett, 2012; Goffman, 1961; Sykes, 1958; Sabo *et al*., 2001), this does not always prevent the formation of friendships based on mutual respect and trust with other prisoners, and it is noted that establishing friendships is common coping mechanisms employed by prisoners in response to the stresses of prison life (Ricciardelli, 2014). This is discussed further in section 2.3.3.

The various aspects of prison life discussed in this section offer some insight into the lived experience of prisoners; that is, what it is like to be a prisoner. However, from a phenomenological approach, the

concept of lived experience is often synonymous with the notion that only individuals who have direct experience of a phenomenon can fully understand it and said to possess a special kind of knowledge unique to their situation (Guenther, 2019; Mapp, 2008; Neubauer *et al.,* 2019). As such, while some individuals who do not possess direct experience of the phenomenon (e.g. imprisonment) may be able to construct a general understanding of it based on their proximity (e.g. prison staff or prisoners' families), it can be argued that these individuals will never fully understand the phenomenon without being subject to it first-hand. It is important to note that while contextual factors influencing prisoners' behaviours may be largely similar (e.g. physical restrictions, social norms, etc.), the prisoner experience may vary significantly depending on prisoners' individual backgrounds (Jewkes, 2002, p. 58). For example, an individual who has lived a comfortable life prior to imprisonment may feel more acutely the pains of this deprivational environment, while an individual who has lived a chaotic life with no home, employment, or financial stability, may find that life in prison is preferable to his prior situation. Such differences contribute to the diverse way prisoners experience their imprisonment and how they view and understand their situation; i.e. their 'lifeworld' is not only informed by the characteristics of their environment but also their prior lived experience and knowledge which "bring a different quality of light to one's experience and generate a different understanding of the world" resulting in a specific 'worldview' (Guenther, 2019, p. 14). Such differences therefore also contribute to how prisoners respond and adapt to their environment. This is discussed in the following section.

2.3.3 Coping with imprisonment

One variable which has frequently been linked to the success of rehabilitation programmes is the ability of prisoners to cope with and adapt to the prison environment. For example, Zamble and Porporino (1990) argue that "coping and behavioural failures are a central part of offenders' relapses into criminal recidivism" (p. 60). Campbell (2005) describes prison as "high in stress, low in opportunities for decision-making, and socially isolating" (p. 18), and work in the fields of sociology and criminology frequent describe all-male prisons as inhibiting the expression of 'feminine' emotions (e.g. those pertaining to weakness or dependency) as a result of social norms in this hypermasculine environment (Courtenay and Sabo, 2001; Crewe, 2012; Goffman, 1963; Holmberg, 2007; Kupers, 2001; Messerschmidt, 2018; Mosher and Tomkins, 1988). As discussed previously, the differing worldviews of prisoners within the shared context of the prison may also result in different behaviours and responses to the stress often associated with this environment. Therefore, while imprisonment is clearly a life-changing experience for any individual, it is important to recognise that the severity of the pains of such a life and ability to cope with life in prison may differ from one individual to another based on individual personality traits. For example, Sykes (1958, p. 78) explains:

> The prisoner's loss of security arouses acute anxiety, in short, not just because violent acts of aggression and exploitation occur but also because such behaviour constantly calls into question the individual's ability to cope with it, in terms of his own inner resources, his courage, his "nerve". Can he stand up and take it? Will he prove to be tough enough?

Studies of cognitive psychology demonstrate that to maintain an emotional balance, individuals adopt coping strategies and employ defence mechanisms (e.g. avoidance, denial, etc.) in response to feeling of stress; often to the overall detriment of their long-term wellbeing (Lazarus and Folkman, 1984). With prison often described as a stressful experience which often results in prisoners engaging in coping behaviours, it is important to carefully define the concepts of stress and coping which can be subject to various interpretations. Lazarus and Folkman (1984) define stress as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and as endangering to his or her well-being" (p. 19). Folkman (1984) defines coping as the "cognitive and behavioural effects to master, reduce or tolerate the internal and external demands that are created by stressful situations" (p. 843). Looking to triggers of stress in the prisoner context, Sobel (1982) reports that female prisoners undergo emotional and physical problems as a result of the stress associated with being deprived from family and their new position in prison among hostile, often dangerous, strangers. Chatman (1999) explains that prisoners attempt to learn to cope with this new environment by interacting with information which helps them to create a worldview, through which they can redefine themselves and make sense of their new situation (p. 209). However, Zamble and Porporino's (1988) study of prisoners' coping, behaviour, and adaptation in the prison environment found that prisoners often entered prison with substantial deficiencies in their ability to cope with stressful situations. When similar problematic situations appeared in prison, the majority of prisoners coped by terminating such thoughts, with 62% reporting an escape response through distraction or attempting to distance themselves mentally or physical from the problem causing stress (p. 122). This notion of prisoners using 'avoidance' or 'escapism' coping strategies to deal with imprisonment is common. For example, Bowker (1977) describes prison culture as "a pressure cooker from which there is little chance of escape except through psychological withdrawal" (p. 35), and Johnson and Dobrzanska (2005) found that to deal with the lack of control they had over their own routines, prisoners often scheduled activities which provided distraction (e.g. reading, playing video games, and watching television) in the little free time they had. Such coping strategies are normally considered to be maladaptive (that is, not constructive) as they may lessen feelings of anxiety and stress in the shorter term but are liable to result in future stress as problems are only deferred and remain unresolved (Zamble and Porporino, 1988).

Examining prisoners' coping strategies in response to the threat of victimisation, Ricciardelli (2014) found that this was often influenced by the social situation of a prisoner. For example, prisoners who employed individual coping used passive strategies such as maintaining "awareness of surroundings" and "quiet independence", often keeping to themselves, and rarely trusting others (pp. 418-420), or aggressive strategies such as "engaging in violence" and "possession of a weapon" to earn respect and demonstrate strength (pp. 421-424). Conversely, prisoners who joined groups, or "alliances", employed passive-aggressive strategies using the privilege, power, and protection gained from membership, as affiliated alliance members could be depended on if needed (pp. 424-425). Ricciardelli (2014) identified another positive effect of alliance memberships in the formation of bonds (p. 427):

> In prison, alliance membership was the foundation of many friendships. Members shared experiences and backgrounds; further strengthening their bonds… Some respondents felt, in reflecting on their experiences, that their membership gave them a sense of belonging; preventing feelings of loneliness and being out of place.

Campbell (2005) explains that prisoners deal with a range of risks given the environmental and cultural restrictions on action and expression, and these risks are often not financial or time-orientated, but rather, threaten an individual's physical and/or mental wellbeing (p. 20). In the case of coping with psychological risk, one key theme which emerges is stigma (Goffman 1961, 1963; Moore *et al.*, 2013, 2016). Goffman (1963) explains that the term 'stigma' originates from Greek Latin and refers to symbols which were cut or burnt onto the flesh of those considered slaves, criminals, traitors, or other blemished persons to indicate that they were "thoroughly bad, dangerous, or weak" and to be avoided, and such individuals were therefore liable to be discredited and to suffer from discrimination (p. 12). Similarly, in a recent review of literature on the concept of stigma, Page (2015) explains "in its most literal usage the term stigma refers to some form of mark or stain" but note that in recent years "the term stigma has tended to be associated almost exclusively with 'inferior' forms of physical appearance, conduct or ethnicity" (p. 2). Looking to the prisoner context of this study, Jewkes (2002) explains that the stigma and social exclusion associated with being an ex-prisoner may make reintegration into society upon release more challenging for those released from prison, consequently increasing the likelihood of recidivism and prisoners' returning to prison (p. 136).

It is important to acknowledge that while prisoners often constitute a stigmatised group within wider society, there is also the risk of individual stigma in the prison environment. For example, Crewe (2012) explains that there is a "hierarchy of status and stigma within the prisoner community" in which "prisoners judge and classify each other in terms of crimes, morality, dangerousness and a range of other factors" (p. 32). He goes on to explain that acts of informing or stealing from other prisoners, signs of weakness, immaturity, lack of intelligence, or mental illness also constitute grounds for

stigmatisation of prisoners which can result in prisoners being mocked, exploited, or ostracised (p. 33). A specific example of this, looking back to the concept of social norms which stem from the hypermasculine 'culture of crime', could involve a male prisoner deviating from accepted behaviours by publicly displaying distress which carries the risk of stigma and may result in exclusion, ridicule, or mistreatment by other prisoners and/or prison staff (Ireland, 2014). As previously discussed, friendships with other prisoners can offer a degree of protection from exploitation and violence and provide a sense of belonging within the wider prisoner community. However, individual prisoners who are associated with stigma (e.g. for specific classes of crime which may be frowned upon such as stealing from the vulnerable and/or elderly) are unlikely to find other prisoners who are willing to establish these useful bonds and may therefore be at even greater risk of exploitation, bullying, and even violence. To protect against such risks, individuals may attempt to conform to social codes by concealing attributes associated with a risk of stigma (Goffman, 1963), and such attempts at concealment might take the form of engaging in self-protective information behaviours such as secrecy or deception (Chatman, 1996). Goffman (1963) explains that presenting this altered image of the self helps to protect against the negative external (imposed by others) and internal (psychological) effects of stigma, such as shame, self-hate, and self-derogation, but he also points out that in withholding personal information, prisoners may be unable to form trusting relationships with others as the formation of such bonds is often dependent on both parties holding potentially discrediting information about the other. Goffman explains that the result of this is a tenuous attempt to balance types of information conveyed versus that which is withheld (p. 57):

> The issue is not that of managing tension generated during social contacts, but rather that of managing information about his failing. To display or not to display; to tell or not to tell; to let on or not to let on; to lie or not to lie; and in each case, to whom, how, when, and where.

Overall, literature suggests that the deprivational effect of the prison environment and limitations on expression imposed by the hypermasculine prison culture is liable to result in prisoners adopting maladaptive coping strategies which do not involve seeking information and/or support to address issues (Clemmer, 1940; Dye, 2010; Goffman, 1961; Sykes, 1958). The importance of reflecting on this links back to earlier discussion regarding prisoners' "readiness" to participate in the rehabilitation process (Ward *et al.*, 2004). For example, similar to the earlier proposed three step model of rehabilitation, Zamble and Porporino (1990) describe the process of successful coping as being dependant on prisoners moving through the following stages (p. 68):

> If an offender is to cope with a serious problem effectively, he or she must first recognize the problem and be able to describe it more or less objectively. He or she must then

generate a list of the available alternatives for action, choose the alternative(s) that will likely be the most effective, and implement the chosen action(s) skilfully and persistently.

Evidence therefore suggests a link between prisoners' coping abilities and their readiness to participate in reformative prison programmes, with the skills to reflect, evaluate, and adapt being essential to the process of rehabilitation. The role of information is also recognised as fundamental to this process, with acquisition of information being key to acknowledging and addressing problematic behaviour, and control and use of information being key to coping with perceived risks in the prison context. Furthermore, at the most basic level, evidence suggests that initial recognition of a need for information may encourage more positive coping skills and motivate prisoners to engage in reflective, learning practices, helping them to move away from criminal behaviours. Overall, there is evidence which highlights the important role of information in supporting prisoners' rehabilitations, justifying the need for a solid understanding of prisoners' information needs and seeking behaviours in ensuring that rehabilitation interventions are appropriately designed and not met with disengagement.

2.3.4 Overview of the prison context

In summary, the perceived role of prisons worldwide has changed over time, with the overarching emphasis moving from punishment to an increasing focus on rehabilitation (Cameron, 1983; Coyle, 1991; Raynor and Robinson, 2009; Smartt, 2006). Rehabilitation can be viewed as a process which begins in the prison and continues after release, causing fundamental changes to the behaviour and attitudes of those who commit crimes for the greater benefit of society, with the primary goal of reducing reoffence rates (Goffman, 1961; Ministry of Justice, 2010; Raynor and Robinson, 2009). However, the success of rehabilitative interventions often rests on adequate and appropriate information being available and accessible to prisoners (Egglestone *et al.*, 2018; Ministry of Justice, 2011; Scottish Government, 2015). Tailoring information provision to prisoners' needs may be difficult due to the various psychological and environmental issues which influence information interactions; particularly the potential risk of stigma associated with exposing vulnerabilities to others in hypermasculine environments (Courtenay and Sabo, 2001; Crewe, 2012; Goffman, 1963; Holmberg, 2007; Kupers, 2001; Messerschmidt, 2018; Mosher and Tomkins, 1988). In addition, evidence suggests that prisoners often attempt to cope with the stressful experience of imprisonment through maladaptive coping strategies which do not involve seeking information and/or support to address issues (Campbell, 2005; Chatman 1999; Clemmer, 1940; Dye, 2010; Goffman, 1961; Liebling, 2012; Sykes, 1958), and which may offer temporary relief but can result in further anxiety and stress long-term (Zamble and Porporino, 1988). In addition to this potentially leaving critical information needs relating to mental health unmet, the inability to confront issues and reluctance to seek associated

information contributes to negative psychological states (i.e. low self-esteem) are also considered contrary to the rehabilitation process (Day, 2009). As such, further investigation is required in this area to understand how prisoners can be supported to address their information needs.

2.4 Human information behaviour

This section defines key concepts of human information behaviour (i.e. information need, information behaviour, and information poverty) through discussion of relevant theories and models. Theories can be understood as explanations and generalizations, often in the form of statements, which attempt to explain the relationships between various phenomena; these propositional statements which explain the relationships between aspects of reality, considered as a whole, constitute the parameters of a theory (Chatman 1996, p. 197). Models offer an alternative approach to understanding phenomena by simplifying complex aspects of reality and presenting them in a clear and logical manner (Frigg, 2022), in a variety of forms including textual, mathematical, and graphic (Wilson, 2010). Wilson (1999) explains that "most [information behaviour] models… describe an information-seeking activity, the causes of consequences of that activity, or the relationships among stages in information-seeking behaviour" (p. 250). In this section, discussion focuses on three theories and one model deemed relevant the current study: Taylor's (1968) question-negotiation theory, Wilson's (1997) Revised General Model of Information Behaviour, and Chatman's (1996; 1999) theories of information poverty and life in the round.

2.4.1 Taylor's (1968) question-negotiation theory

A long-standing criticism of information science research is the tendency to leave key concepts ill-defined (Wilson, 1981). In line with this, despite being one of the most widely used constructs to explain the reason people choose to engage in information seeking, the concept of *information need* remains ill-defined (Case and Given, 2016; Ford, 2015; Savolainen, 2017); with definitions often presented according to the interests and expertise of specific authors (Forsythe *et al.,* 1992). For example, information need has been defined as a recognition of uncertainty (Atkin, 1973; Krikelas, 1983), as a lack of knowledge (Miranda and Tarapanoff, 2008), and as 'gaps' which individuals must address to make sense of their environment (Dervin, 1983). While the concept of information need remains much debated, it is nonetheless generally recognised as a "useful construct" for understanding why people seek information (Savolainen, 2017, p. 18). Drawing Case and Given's (2016) discussion regarding the various definitions of information need in the LIS field, for the purposes of the current study, information needs are viewed as context-sensitive secondary needs triggered by primary physiological needs and associated feelings of uncertainty (pp. 94-95).

Taylor's (1968) question-negotiation theory, one of the most frequently cited theories of information seeking behaviour (Case and Given, 2016; Edwards, 2005; Palmquist, 2005), describes the process of information need recognition and stages through which individuals move when attempting to articulate their needs to others. Developed from qualitative interviews with librarians and other information specialists, Taylor's (1968) theory proposes that an information need may exist at four levels on the way to being articulated to a system or other individual: 1. visceral – "the actual, but unexpressed need for information"; 2. conscious – "the conscious, within-brain description of the need"; 3. formalised – "the formal statement of the need", and; 4. compromised – "the question as presented to the information system" (p. 182). Taylor emphasizes that these four levels are not distinct from each other, but instead "shade into one another along the question spectrum" (p. 182). While the latter three levels indicate recognition of an information need (even if poorly understood), Taylor explains that *visceral* initial conception of an information need is often only experienced by individuals as "a vague sort of dissatisfaction", making formal recognition and understanding of needs at this stage challenging (p. 182). However, one weakness of this theory is that, drawing on MacKay (1961), Taylor (1968, p. 180) proposes that information needs arise from:

> A certain incompleteness in the inquirer's picture of the world – an inadequacy what we might call his state of readiness to interact purposefully with the world around him in terms of a particular area of interest.

As pointed out by Savolainen (2017), Taylor (1968) fails to specify how "incompleteness" or "inadequacy" gives rise to visceral or conscious information needs, which is problematic when exploring the states that might precede cognitive awareness of needs. Given that it is acknowledged that information needs can be unrecognised or misunderstood by those who possess them (Derr, 1983; Green, 1990), this is an important area for attention if information needs are to be met.

One theory which offers insight into the condition which precedes *visceral* awareness of information needs is offered by St. Jean (2012; 2017) who proposes the concept of "incognizance". St. Jean (2017) explains that at this stage, "The individual does not yet perceive an inadequacy in their state of knowledge and does not yet have even a visceral sense that they have an information need" (p. 315), and suggests several reasons for incognizance, including incorrect assumptions (e.g. attributing leg pain to a pinched nerve rather than diabetes) and information being provided at the wrong time or in the wrong situation (p. 316). A review of literature suggests further issues which complicate recognition and understanding of information needs. For example, information needs can evolve as individuals encounter new information which influences their outlook on reality, making the task of recognising and understanding them more challenging (Case, 2002; Dervin, 1992; Harter, 1992; Ormandy, 2009; Savolainen, 2006). Also, Johnson *et al.* (2001) explain that individuals who lack self-

belief or feel they have little control over a situation may defer recognition of information needs while other needs deemed more immediately pressing and/or significant are attended to (p. 341). In addition, Case (2002) explains that individuals may choose not to recognise information needs which appear complex and overwhelming due to the existence of related needs which must be resolved before the initial need can be addressed (p. 98). Importantly, St. Jean (2017) states that an enduring a state of incognizance can be potentially damaging or harmful because individuals subject to this state are "unable to recognize the relevance and potential usefulness of information that could fill that need" (p. 315). St. Jean (2012) explains that this is the "insidious" nature of incognizance, as by the time an information need has been recognised, irreversible physical damage may have already occurred (p. 9).

It is important to note that individuals can only act to resolve information needs which they are aware and conscious of, and therefore, the progression of an information need from the 'visceral' to 'conscious' level (i.e. formally recognised) is crucial if needs are to be met. If the information need progresses to a 'conscious' level, that is, recognised but still ill-defined, Taylor (1968) explains that librarians and other information professionals may now assist the individual to comprehend and articulate the need, highlighting a key zone for potential external intervention (p. 182):

> The inquirer may, at this stage, talk to someone else to sharpen his focus. He presumably hopes that two things will happen in this process: (a) an understanding of the ambiguities by his colleague; and (b) the gradual disappearance of these ambiguities in the course of the dialogue.

Given that information needs can be unrecognised or misunderstood by those who possess them (Derr, 1983; Green, 1990), information seeking *by proxy* can offer an avenue through which individuals are assisted to recognise, understand, and address their information needs, as this refers to situations in which interpersonal sources seek information on behalf of the individual (McKenzie, 2003). McKenzie (2003) explains that individuals can make contact or interact with intermediary sources which can offer information seeking by proxy in several ways, including "being identified as an information seeker by an acquaintance or stranger, being referred to a source through a gatekeeper or intermediary, or being given advice, information or a prescription" (p. 27). An attractive aspect of this mode of information seeking is that it is not reliant on individuals having formally recognised their information need, which can instead be deduced by intermediaries and is not restricted by an individuals' own information seeking abilities (i.e. because intermediaries may have internet access or higher literacy skills and therefore, be able to access and interpret information which individuals could not otherwise acquire). However, seeking by proxy requires the individual subject to the information need to offer themselves up to scrutiny by another person in order to discover the nature of their

need (e.g. potentially being asked questions about their thoughts) and is entirely dependent on their willingness to interact with intermediary sources in the first place. Case and Given (2016) draw attention to further issues intermediaries may face when attempting to assist individuals to address their information needs, explaining, "We can also ask people what they want, but people may not be able to articulate their needs too easily – this is certainly true if they are not even aware of their own needs" (p. 81). As such, the issue of information needs which are not readily recognised and/or articulated to others remains, and it is acknowledged that this can complicate the role of the proxy seeker who must first ascertain what information may be relevant to the individual.

While Taylor's (1968) theory has the potential to offer insight into the extent to which an individual is aware of their information needs and can be used to formulate theories on factors that might influence early stages of information need recognition and articulation, it is important to note that this theory was developed from formal question-negotiations between individuals and information professionals and not intended to be applied to less structured informal acts of information seeking. There is therefore little detail in this theory regarding how an individual would progress their conscious information need to a formalised need in the absence of the assistance of a librarian or other information professional. Despite this, or perhaps, in light of this, the application of this theory in the context of prisoners' experiences of information is liable to yield new insight into the applicability of this theory and associated concepts not only within the specific context of the prison, but also in the 'everyday' context of information behaviour. Therefore, drawing on Taylor's proposed levels of need, this study will explore factors which influence recognition and articulation of information needs in the prison context to identify factors which may contribute to prisoners experiencing difficulties in recognising and/or understanding their information needs, and to highlight stages where prisoners may benefit from additional support in addressing their information needs.

2.4.2 Wilson's (1997) revised general model of information behaviour

The concept of information behaviour can be viewed as encompassing a wide range of individuals' interactions with information in their daily lives, including planned and intentional attempts to seek information as well as the unintentional or serendipitous encountering of information (Case and Given, 2016; Wilson, 2000). Presented in Figure 2 on the following page, Wilson's (1997) Revised General Model of Information Behaviour attempts to present the complex relationship between contextual and cognitive factors which influence an individual's motivation to address information needs, their selection and use of specific information sources, and their subsequent seeking behaviours. Developed from earlier models over a period of two decades (Wilson 1981; 1994), Wilson's (1997) model draws not only from information science, but also fields such as decision-

making, innovation, psychology, health communication, and consumer research. Wilson's (1997) model is regularly cited in information science and health studies (e.g. Campbell, 2005; Case *et al.,* 2005; Godbold, 2006; Kundu, 2017; McKenzie, 2003; Niedzwiedzka, 2003; Ormandy, 2009; Phiri *et al.*, 2018), but has only previously been applied in the prison context in a review of literature by Campbell (2005). Given the stressful experience of imprisonment and significance of coping strategies within this context, Wilson's (1997) model is considered to offer a suitable macro-level lens through which the various contextual factors that influence prisoners' information behaviours can be explored. Discussion in this section focuses on the *activating mechanisms*, *intervening variables,* and *information seeking behaviours* presented in Wilson's model.

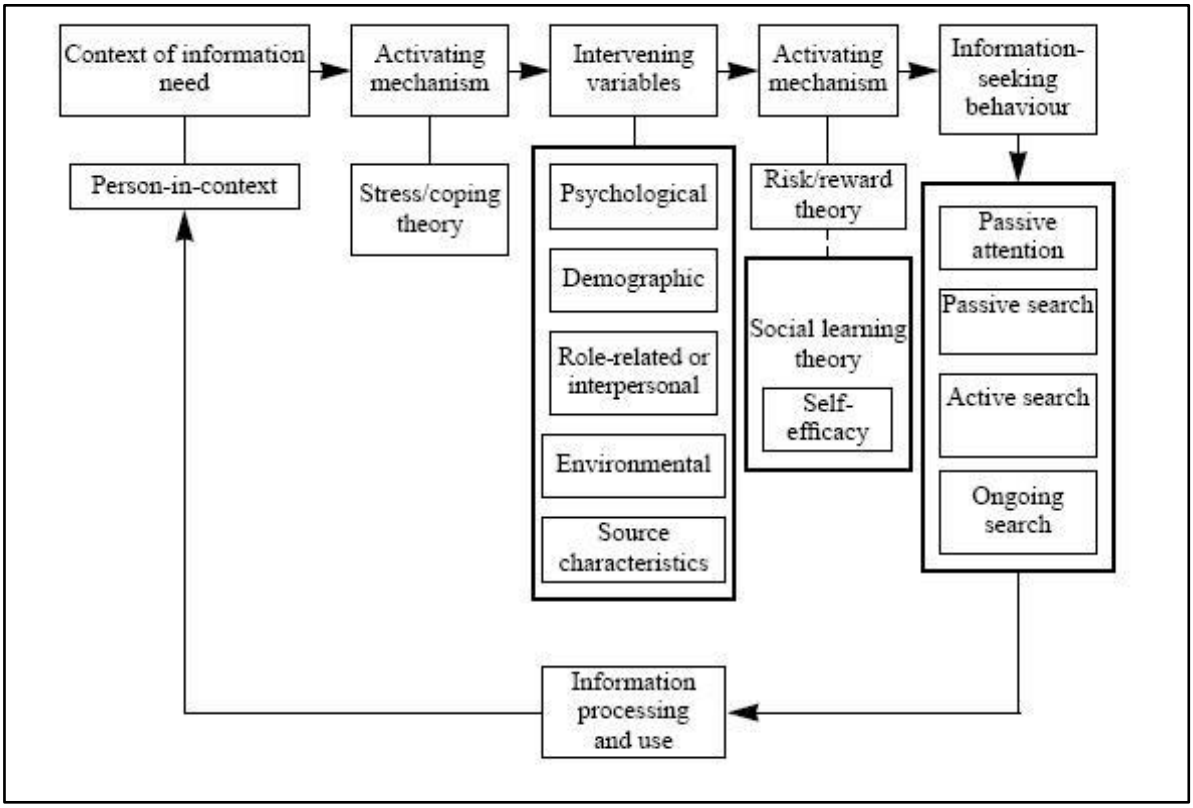

Figure 2 Wilson's (1997) Revised General Model of Information Behaviour

Wilson's (1997) 'activating mechanisms', drawn from theories in other fields such as psychology, consumer research, and decision-making, highlight factors which influence an individual's motivation to seek information, with reference to stress/coping theory, risk/reward theory, and social learning theory. An overview of each activating mechanism is presented below.

Stress/coping theory, drawn from the field of psychology and developed by Lazarus and Folkman (1984), describes the ways in which individuals appraise potential threats and respond to stress-inducing issues. While seeking information may help individuals cope with situations by reducing their uncertainty (Kuhlthau, 1991) and helping them to make sense of their environment (Dervin, 1983),

Case and Given (2016) point out that "uncertainty is a beginning stage in any search, and this is often accompanied by feelings of anxiety – which is a powerful motivator to either get on with the work or to give up entirely" (p. 86). As such, it is recognised that information seeking will not always follow feelings of uncertainty and that individuals may instead choose to ignore or avoid information in response to recognition of their needs. Several theories support this, including monitoring and blunting theory, from the field of psychology, which proposes that in stressful situations individuals will normally conform to one of two different behavioural types; *monitors*, who attend to potentially threatening information, or *blunters*, who seek to avoid or distract themselves from this information (Miller, 1979; Miller and Mangan, 1983). Cognitive dissonance theory, also from the field of psychology, provides further insight and describes the extent to which individuals can tolerate the discomfort associated with inconsistencies in their cognitions (Festinger, 1957), and proposes that individuals with low tolerance will often avoid situations and information which conflict with their existing knowledge, beliefs, and opinions (Hyman and Sheatsley, 1947). In relation, uncertainty management theory, from the field of communication, proposes that individuals may choose to avoid information and even increase their uncertainty in certain situations if this helps to foster feelings of optimism, such as in healthcare settings where long-term prognoses of patients' health may be poor (Brashers, 2001; Brashers *et al.,* 2002). Given that imprisonment is recognised as a stressful experience and evidence suggests prisoners often employ maladaptive coping strategies which involve avoidance of stress-inducing issues and information (Bowker, 1977; Clemmer, 1940; Dye, 2010; Goffman, 1961; Johnson and Dobrzanska, 2005; Sykes, 1958; Zamble and Porporino, 1988), it can be surmised that prisoners, as a group, may be more likely to be 'blunters' and to possess a high level of tolerance for cognitive dissonance and feelings of uncertainty. Supporting this theory, Chatman (1999) describes prisoners' 'life in the round' as "a life with an enormous degree of imprecision and, surprisingly, accepted levels of uncertainty" (p. 211).

Risk/reward theory, developed in the field of consumer research by Settle and Alreck (1989), describes situations in which the cost (i.e. risk of potential negative consequence) of a attaining a particular entity is evaluated against the potential benefit (i.e. reward) and/or value of the item. The five components of risk/reward theory include: *performance risk*, the probability that the product will perform to an accepted standard; *financial risk*, the affordability of the product; *physical risk*, whether the product is considered safe or potentially harmful; *social risk*, the likelihood that the product will impress others; and *ego risk*, how the product might affect an individual's self-esteem or happiness. Wilson (1997) presents this theory as a useful lens for exploring the reasons why individuals may choose to seek information in a particular format or from a particular source, and why some individuals may not engage in information seeking at all. Case and Given (2016) state that "all people

seek and use information, yet for some people and in some situations the stakes are much higher" (p. 12), and prison presents one such context in which this increased level of risk applies. For example, in her theory of life in the round, Chatman (1999) discusses risk as frequently associated with the prevalence of *social norms* of the prison; deviation from which carries both physical and social risks (e.g. talking to prison guards too often can expose prisoners to the risk of stigma and being labelled a 'snitch' which could then lead to them becoming a target for bullying and/or violence from other prisoners). Supporting this, Campbell (2005, p. 29) explains:

> In the case of prisoners, we see a group where physical danger is ever present, and the social risk of information seeking is also a physical risk. Violations of any social code in prison results in violence. This threat of violence leaves an inmate with the task of judging whether gaining information will be worth whatever risk would be attached to the attempt.

Notably, Wilson does not define the concept of 'risk' in his discussion of risk/reward theory. Given that, as previously discussed (see section 2.3.2), this a highly nuanced concept and subject to diverse interpretations depending upon the context in which it is used (e.g. suggesting potential detriment to a company's sales in marketing research versus potential issues of exclusion and social stigma for individuals in social research), this is a key weakness of Wilson's model. Further weaknesses are discussed at the end of this section.

Social learning theory, developed by Bandura (1971) in the field of sociology, refers to the learning behaviours which occur within a social context, such as observational learning, imitation, and modelling which describe methods through which individuals learn from one another. The central construct of this theory is the concept of s*elf-efficacy* (or 'sense of personal mastery') which Bandura (1977) defines as "the conviction that one can successfully execute the behaviour required to produce the outcomes" (p. 193). Drawing on this proposition, Wilson (1997) notes that while the information required to address a need may be available, individuals may lack confidence in their ability to properly access or utilise the source and in such situations may choose not to access and/or utilise it (p. 563). Campbell (2005), drawing on observations made by Bowker (1977), notes that information seeking itself can result in an increased sense of self-efficacy and a reduction in feelings of helplessness, while Case *et al.* (2005) propose that one of the very reasons an individual might feel motivated to seek information in the first place is to improve their own sense of self-efficacy and ability to cope with future problems (p. 563). Bandura (1977) states that "the strength of people's convictions in their own effectiveness is likely to affect whether they will even try to cope with given situations" (p. 193), and revisiting this in later work, Bandura (1994) proposes that individuals with greater self-efficacy are

more likely to set higher goals, verbalize information needs, and show greater commitment and motivation to address their needs (p. 268-275). Notably, Chatman (1999) found that prisoners who had become assimilated into the small world of the prison had often done so by conforming to codes of behaviour learned by observing and extracting information from other prisoners. This suggests that successful integration into prison culture may be marked by a reduction in self-efficacy and increasing dependence on other prisoners for information. Therefore, with the general prisoner profile marked by a low sense of self-efficacy both prior to and during incarceration (Goffman, 1961; Sabo *et al.,* 2001) and a correlated lack of motivation to engage in information seeking (Chatman, 1999), it is difficult to surmise how prisoners might be empowered to act independently to address their information needs.

Wilson's (1997) 'intervening variables' refer to factors which influence types of information sought and information sources utilised by individuals. Wilson (1999) highlights that the influence of these variables "may not be exclusively negative, at times even encouraging or promoting information seeking" (p. 256). These intervening variables include *psychological* factors, such as existing knowledge, prejudices, preferences, self-perception, emotions, interests, memories, intuitions, attitudes, experiences, motivations, and personality (Wilson, 1997, p. 556-562). Looking to psychological factors in the prisoner context, with the general prisoner profile characterised by anxiety, low self-esteem, and feelings of helplessness (Campbell, 2005; Goffman, 1961; Gravett, 1999; Sabo, 2001), it is recognised that such attributes are liable to have a negative influence on information seeking behaviour. Another intervening variable in Wilson's (1997) pertains to the *demographic* characteristics of groups (i.e. age, sex, socioeconomic status, and educational level). Offering insight into the influence of demographic characteristics in the prisoner context, Shirley (2006) explains that while prisoners have information needs similar to those of the general population, they can "experience difficulties in articulating their information needs or in their attempts to seek information" due to often having lower levels of educational attainment (p. 2). Also included in Wilson's (1997) intervening variables are the role-related and interpersonal issues which most likely occur when the source in question is another person. The influence of such issues in the prison context can be seen in Åkerström's (1988) research into how prisoners identify "snitches" (i.e. informants) within the prisoner community, which found that in comparison to high-ranking prisoners, those of a lower rank were often considered more 'suspicious' for speaking to prison staff. Also included in Wilson's (1997) intervening variables are considerations relating to e*nvironmental* factors (i.e. time, geography, and culture) which influence accessibility and appropriateness of information sources. Campbell (2005) explains, "[Prisoners] are behind bars and the environment is extremely restricted, a condition detrimental to the success of information seeking behaviour in every sense" (p. 25), offering insight into the strong influence of the physically secure environment of the prison on prisoners'

information seeking behaviour. Lastly, also included are intervening variables relating to s*ource characteristics* (i.e. credibility and channel of communication) which influence the identification and selection of sources, which can be seen in the prison context in the form of the social norms which govern prisoner culture, ultimately determining the determine the credibility and appropriateness of sources (Chatman, 1999).

Wilson (1997) refers to four types of 'information seeking behaviour' in his model to describe the various ways in which individuals can obtain the information required to address their needs, including: *passive attention*, where individuals acquire information without intentional seeking (e.g. watching television); *passive search*, where behaviour not actively directed at seeking information inadvertently leads to the acquisition of information relevant to the individual (including seeking by proxy); *active search*, where individuals purposefully and actively seek information, and; *ongoing search*, where individuals continue (though perhaps infrequently) to engage in information seeking to expand upon already established knowledge, ideas, beliefs or values (p. 562). Wilson explains that passive attention and passive search may be better considered to be the *acquisition* as opposed to *seeking* of information because they reflect occasions where relevant information is not purposefully sought by the individual but rather encountered without conscious effort. Other modes of searching for information are more proactive on the part of the individual, such as active search and ongoing search, as they reflect a conscious effort to seek out information or, at the very least, to monitor developments in an area of interest. Given the recognition of prisoners' low self-efficacy and dependency upon staff in existing literature (e.g. Campbell, 2005; Goffman, 1961; Sabo *et al.,* 2001), it may be that active and ongoing modes of information seeking, which rely on individuals feeling sufficiently motivated and able to attain information independently, are less likely to occur in the prison context. As such, prisoners may be more liable to encounter information that relevant to their needs via behaviours involving passive attention, such as watching television or listening to the radio (presenting an interesting potential to link prisoners' use of media as a coping mechanism and distraction from stress-inducing issues). However, given prisoners' unique situation and associated needs, passive attention is unlikely to assist in the recognition and/or fulfilment of more than a few of their information needs. Passive search and in particular, seeking by proxy, is a mode which may be more likely to assist prisoners to recognise and address their information needs.

One of the key strengths of Wilson's (1997) Revised General Model of Information Behaviour is its broad coverage of contextual factors that can influence information needs and behaviours which offers a structure for exploring information behaviour within a specific context. In addition, the incorporation of interdisciplinary concepts (from outside the LIS field) provides valuable theoretical guidance to further studies of the information behaviour of groups, particularly in relation to the

analysis and interpretation of data (Ford, 2015, p. 130). For example, drawing upon stress/coping theory from the field of psychology or risk/reward theory from the field of consumer research. However, despite Wilson's (1997) model offering a useful macro-level model for exploring how the prison environment and prisoners' lived experience of this small world influences their information needs and behaviours, it is important to acknowledge the various criticisms of this model. This includes the lack of explanation regarding the relationships between information need, activating mechanisms, and intervening variables (Savolainen, 2017), the graphic separation of the 'context of need' from influencing factors (Niedzwiedzka, 2003), and the linear and cyclical design indicating no point of search failure and/or abandonment or back-and-forth between various stages in the model (Case *et al.,* 2005; Robson and Robinson, 2013). Wilson's (1997) model has also been criticised for utilising concepts drawn from other theories (e.g. stress, risk, etc.) without presenting a definition of these key concepts to the reader (Case and Given, 2016, p. 164).

Despite these various criticisms, Wilson's (1997) model is considered an appropriate macro-level for exploring prisoners' information needs and seeking behaviours. To address some of the weaknesses of this model, the current study clearly defines key concepts such as 'stress', 'coping' and 'risk' (see section 2.3). The study will pay particular attention to points of failure and/or abandonment in the information seeking process, where various obstacles or decisions prevent prisoners from addressing their needs. This study also seeks to expand significantly upon findings of Campbell's (2005) review of literature on the information needs of prisoners, by obtaining and presenting empirical data which offers much needed depth of insight into the contextual factors which influence prisoners' information needs and seeking behaviours. The current study will also nest other relevant theories, such as those by Chatman (1996; 1999) and Taylor (1968), within the context of this model as intended by Wilson (Wilson, 1999). In summary, this study draws upon concepts from Wilson's (1997) model and the various theories nested within to explore factors which influence recognition, understanding, and articulation of information needs, selection of sources, and motivation and/or willing to seek information to address needs in the prison context.

2.4.3 Chatman's (1996; 1999) theories of information poverty and life in the round

Chatman (1996) describes information poverty is a state of being in which individuals are unwilling or unable to resolve significant or important information needs (p. 197), and Chatman and Pendleton (1995) explain that information-impoverished individuals can be considered systematically deficient in what they know as a result of this. Theories of information poverty have been previously applied by authors in the context of vulnerable and/or marginalised groups, including in research on the information behaviours of female janitors, single mothers, and elderly women (Chatman, 1996) and

prisoners (Canning and Buchanan, 2019; Chatman, 1999). Given the various difficulties (e.g. relating to social norms, stigma, etc.) prisoners may face when attempting to address needs as discussed in the previous sections of this chapter, Chatman's (1996; 1999) theories of information poverty and related work on 'life in the round' in prisons provide useful guiding concepts for the current study. These theories are discussed below.

Chatman's (1996) theory of information poverty draws on Merton's (1972) sociology of knowledge theory to compare how the information behaviour of individuals living in small worlds (*insiders*) differs to those living out with (*outsiders*). This theory is based on examinations of the information behaviours of three groups of females: janitors, single mothers, and elderly women. Chatman (1996) states that "an impoverished information world is one in which a person is unwilling or unable to solve a critical worry or concern" (p. 197) and explains that her research found that "an attitude of avoidance was the norm" amongst such persons when faced with potentially stressful issues (p. 203). Individuals in this world were found to often mask, distort, and/or avoid addressing their information needs, particularly those which could reveal vulnerabilities to others or contradict social norms within a shared context, because of the perceived risks associated with doing so (e.g. exclusion or rejection by others within the shared context). A number of self-protective information behaviours were identified, including: *secrecy*, withholding one's true state of affairs by guarding against disclosure; *deception*, hiding one's true condition by giving false or misleading information; *risk-taking*, weighing up the perceived risks of sharing information with the potential gains; and, *situational-relevance*, evaluating the relevance of information to the individual's situation (pp. 195-202). Summarising the findings of her research, Chatman (1996) presents six key propositions to describe an information-impoverished world as one in which individuals: 1) feel they do not have access to the support and/assistance required to address their needs; 2) feel that outsiders withhold access to certain types of information; 3) engage in self-protective behaviour to protect themselves from the risks associated with deviating from social norms; 4), do not trust that others outside of their small world are able to offer useful information; 5) do not disclose their problems to others due to the perception that the risks of doing so outweigh the benefits, and; 6) are selective of the information they allow to be introduced in their world (pp. 201-202).

Building on her earlier work on information poverty, in her subsequent work on life in the round, Chatman (1999) found that the small world of the prison contributes to a state of information impoverishment amongst prisoners, with their needs remaining largely unaddressed due to social barriers. Drawing upon Merton's (1972) sociology of knowledge, Chatman (1999) explains that prisoners become integrated into the small world of the prison and transition from *outsiders* to *insiders* (whose values lies within the prison) by means of a shift in their belief-system though specific

language and customs, ultimately leading to the construction of a new worldview (p. 208). Summarising the findings of this research, Chatman presents six key propositional statements which define her theory of 'life in the round' (p. 214):

1. A small-world conceptualization is essential to a "life in the round" because it establishes legitimized others (primarily insiders) who set boundaries on behaviour.
2. Social norms force private behaviour to undergo public scrutiny. It is this public arena that deems behaviour - including information-seeking behaviour - appropriate or not.
3. The result of establishing appropriate behaviour is the creation of a worldview. This worldview includes language, values, meaning, symbols, and a context that holds the worldview within temporal boundaries.
4. For most of us, a worldview Is played out as life in the round. Fundamentally, this is a life taken for granted. It works most of the time with enough predictability that, unless a critical problem arises, there is no point in seeking information.
5. Members who live in the round will not cross the boundaries of their world to seek information.
6. Individuals will cross information boundaries only to the extent that the following conditions are met: 1) the information is perceived as critical, 2) there is a collective expectation that the information is relevant, and 3) a perception exists that the life lived in the round is no longer functioning.

Childers and Post (1975) note that individuals who exist in information impoverished circumstances often tend to feel fatalistic and helpless (pp. 32-34). Given reports that the general prisoner profile is largely characterised by feelings of frustration, helplessness, and low self-efficacy (Campbell, 2005; Goffman, 1961; Liebling, 1994; Sabo *et al.,* 2001; Sykes, 1958), the inability to resolve information needs may compound these issues, perpetuating a cycle of negative emotions which can negatively influences prisoners' rehabilitation (Day, 2009). Chatman's (1999) theory of life in the round is acknowledged as providing a "useful framework for studying and working with various groups" due to the applicability of this theory to a diverse range of groups living in small world contexts and the potential for associated concepts (e.g. social norms, worldview, etc.) to offer insight into the relationship between information needs and the "information worlds" (i.e. social contexts) of individuals, which can then be utilised to inform the design of information services for such groups (Fisher *et al.,* 2005, p. 82). Recent research has demonstrated the ongoing validity of Chatman's (1999) finding that prisoners are often liable to exist in information-impoverished circumstances with their information needs largely unmet (e.g. Canning and Buchanan, 2019). However, there is currently limited evidence which offers insight into the influence of self-protective information behaviours on

the meeting of information needs in the prison context and the steps that can be taken to mitigate the issues which result in prisoners living in information poverty.

Chatman's (1996; 1999) theories of information poverty and life in the round offer a valuable theoretical lens through which the influence of the small world of the prison on prisoners' information needs and behaviours can be examined, and importantly, can be utilised to explore how social factors within this environment (such as acceptable behaviours and topics of discussion) may contribute to problems of unmet information need in prisoners. However, it is important to note that Chatman's studies were conducted in largely female contexts and as such, offer little insight into the application of her concepts within masculine contexts such as all-male prisoners. There is also a lack of definition on key concepts utilised in Chatman's theories, such as 'risk' and 'trust' which are clearly defined within the context of this study (see section 2.3 for definitions and discussion). However, this does not detract from the value of utilising Chatman's works as a theoretical lens to guide the current study given that the application of the propositions and concepts relating to information poverty and life in the round in the male prisoner context is liable to yield much needed further insight in this area. Therefore, this study utilises propositions and associated concepts presented in Chatman's (1996; 1999) theories of information poverty and life in the round to further explore the contextual influence of the prison on information behaviour and the meeting of prisoners' information needs.

2.4.4 Overview of human information behaviour

In summary, information needs are viewed as context-sensitive secondary needs triggered by primary physiological needs and associated feelings of uncertainty (Case and Given, 2016). Information behaviour is viewed as encompassing a wide range of interactions with information in individuals' daily lives, including planned and intentional seeking behaviours as well as the unintentional or serendipitous encountering of information (Case and Given, 2016; Wilson, 2000). Information poverty is viewed as a state of being whereby individuals are unable and/or unwilling to resolve significant or important information needs (Chatman, 1996), and previous work suggests that prisoners often exist in information-impoverished circumstances, unable to address their information needs (Canning and Buchanan, 2019; Chatman, 1999). The current study will draw upon concepts of the theories and model discussed in this section (i.e. Chatman, 1996, 1999; Taylor, 1968; Wilson, 1997) to explore prisoners' information needs, sources of information used by prisoners and why, and issues influencing the meeting of prisoners' information needs; thus, helping to identify ways to support prisoners to address their information needs. The next section examines the current level of understanding in this area to identify research gaps and appropriate methodological approaches.

2.5 Related work

This section presents an overview of existing studies of prisoners' information needs and seeking behaviours to determine the current level of research in this area, identify research gaps in the literature, and examine the suitability of previously adopted methodological approaches for the purposes of the current study. Given the limited number of studies on prisoners' information needs and seeking behaviours, search criteria were expanded to include literature on prison libraries (see section 2.5.2) as it was felt findings might also be of value and help inform the current study.

2.5.1 Information need and seeking behaviour studies in the prison context

In a review of information behaviour studies, Ford (2015) reports an increased emphasis on marginalised groups, however, there currently remains a lack of qualitative research into prisoners' personal experiences of information. Campbell (2005) explains, in her review of literature on the topic, that "the information studies field has not ignored the prison population, but very few articles found were user-focused" (p. 19). A review of literature reveals few studies which investigate the information behaviour of prisoners, and of those which do exist, many are now outdated, limited to specific geographic contexts or demographic groups, lacking in empirical evidence, or are centred around library services. Despite these various limitations, these studies offer a useful guide, highlighting the current level of understanding regarding prisoners' information needs and seeking behaviours. An overview of relevant studies is presented below, including data collection methods, participant demographic details (where provided by the authors), key findings, and limitations. Studies are discussed in chronological order.

Stevens (1994) examined the information needs of US prisoners, drawing on a data collected from semi-structured interviews with 36 prisoners (age and sex unspecified) and 24 prison staff across three US prisons of varying security level. Stevens does not identify specific categories of need but reports that prisoners' information needs are determined by their length of sentence and time left to serve and the extent to which information needs are satisfied is dependent on the prison regime and perceived effectiveness of formal information channels (p. 30). Stevens notes that prisoners themselves may be unable or unwilling to articulate their information needs for a variety of reasons, including distrust towards prison authorities, the rapid institutionalization process, low motivation, and low expectations (p. 31). Stevens also identifies several factors which negatively influence prisoners' information seeking, including limited independent access to information, inconsistencies and arbitrariness of information provision, poor timing of information provision, lack of advice on how to utilise provided information, inadequate staff shortages and inadequate training, and prisoner hostility towards staff (p. 32). Stevens concludes that, as a result of these issues, "in some cases

information needs were not addressed at all" and adds that even when needs were met and prisoners were happy with the end result, they often appeared to be "dissatisfied with the process" (p. 33). However, the significance of findings is limited as this study is presented in the form of a short report which offers limited empirical data to evidence findings.

Chatman (1999) examined the information behaviours of US prisoners through ethnographic research and interviews with 80 adult female prisoners from one US prison. Drawing upon Merton's (1972) sociology of knowledge, Chatman (1999) reports that prisoners become integrated into the small world of the prison by means of a shift in their belief-system though specific language and customs, transitioning from *outsiders* to *insiders* whose values lie within the prison (p. 208). Chatman uses several key concepts to describe aspects of small world living which influence types of information shared and types withheld: *social norms*, codes of behaviour which dictate what is normal and accepted and what is not; *social types*, characteristics which distinguish individuals from other groups; and *worldview*, a system of beliefs held by all members who live in the small world (pp. 213-214). Chatman explains that in becoming integrated into the small world of the prison, prisoners become part of 'life in the round' which she describes as "a public form of life in which things are implicitly understood" (p. 212). Chatman concludes that life in the round will ultimately have a negative impact on information seeking, as members will only cross the boundaries of their small world in order to seek out information if "(1) the information is perceived as critical, (2) there is a collective expectation that the information is relevant, and (3) a perception exists that the life in the round is no longer functioning" (p. 214). Building on her earlier work on information poverty (Chatman, 1996), Chatman (1999) argues that the small world of the prison contributes to a state of information impoverishment amongst prisoners, with their needs remaining largely unaddressed due to social barriers (p. 214). However, various limitations (e.g. participant demographic, case study elements, and age of study) call into question the validity/generalisability of findings, and as this study focuses primarily on information behaviour, little insight is offered into prisoners' information needs.

Campbell (2005) examined the information behaviours of prisoners by mapping existing literature on prison culture and prison libraries against Wilson's (1997) Revised General Model of Information Behaviour. Campbell (2005) asserts that prisoners have information needs which stem from prisoners' attempts to cope with their imprisonment (such as the need to know how to identify trustworthy individuals, make other prisoners accept them, and their rights to humane treatment) and information needs relating to their release, often on topics such as the law and the opportunities they will have once free (p. 20). Campbell explores the influence of intervening variables and activating mechanisms in the prison context as proposed in Wilson's (1997) model. For example, Campbell (2005) reports that demographic characteristics such as educational level and interpersonal characteristics such as trust

influence prisoners' selection and use of sources (pp. 23-24), and that prisoners' attempts to cope with stress and manage perceived risks can negatively influences their motivation to seek information (p. 20). Self-efficacy in the prison context was found to be almost non-existent, with literature found by Campbell often describing prisoners in terms of their 'passiveness' and 'powerlessness' (p. 29). In addition to acknowledging the value of exploring information behaviour through an interdisciplinary perspective as presented in Wilson's (1997) model, Campbell (2005) comments that "prisoners are perfect examples of people under extreme stress" (p. 31) and proposes that examining prisoners' information behaviour may yield further insight into the impact of stress on information behaviour. However, given that Campbell's study relies solely on existing literature and does not involve prisoners, empirical evidence is lacking which limits the significance of findings.

Nacro (2009) examined the information needs of UK female prisoners with mental health issues via 6 focus groups and an unspecified number of interviews with juvenile and adult female prisoners at two prisons in England. Many participants of this study reported a need for mental health support while imprisonment, and while some stated that other prisoners were the best source of support with regards to mental health issues, others explained that they were "scared" to reveal such needs to other prisoners and preferred to discuss such issues anonymously over the phone (pp. 9-10). The authors describe unmet information needs relating to healthcare and medication as "a huge source of anxiety" for female prisoners (p. 12), and some participants expressed a dissatisfaction with waiting times for healthcare appointments which could impede their access to information (p. 13). The report concludes, "From the discussions we had with the women, it was clear there is a lack of information available for women prisoners, and particularly those with mental health issues" (p. 17) and argues that unmet mental health needs may make reintegration into society more challenging for female prisoners following their release. However, findings provide insight limited to mental health topics and generalisability is limited as the study focuses on female prisoners with mental health issues.

Rafedzi and Abrizah (2014) examined the information behaviours of young male Malaysian prisoners, through qualitative unstructured interviews with 23 male juvenile prisoners (aged between 13 and 21 years old) housed in four Malaysian correctional schools. Key findings include the identification of common information needs, including those relating to prison operations, family, sex, health, recreation, legal support, and academic studies (p. 7). Participants often reported feeling "a sense of vulnerability" shortly after their imprisonment, which was attributed to "fearful representations of prison in popular culture" and which led to an increased need for day-to-day information for security and mutual support (p. 7). Other prisoners were valued as a "crucial source of practical and emotional support" and other frequently utilised sources of information included friends, teachers, family, television, and books (p. 10). Most participants reported a reluctance to interact with prison officers

due to the perception that this was not the "correct or preferred source to get any information", but no explanation is given as to why participants felt this way (p. 11). Overall, the authors conclude, "From the interviews we had with participants, it was clear that there was sufficient information available in the prison environment for juveniles, and particularly for those with different education levels" (p. 13). However, while authors claim to investigate the information needs of juvenile prisoners, findings are presented in a library service-centric format, focusing predominantly on participants' reading interests and the extent to which the prison library collection met these. Therefore, despite helping to identify categories of need and preferred sources, findings are of limited use to the current study, and other limitations relate to the lack of generalisability due to the age and geographic demographic of participants.

Bajić (2015) examined the information needs and reading interests of Croatian prisoners by surveying 504 male and female prisoners (age and sex ratio unspecified) housed in six prisons of varying security level in Croatia. The most reported information needs related to rights in the prison, family, life after prison, employment, and prison rules, with less frequently reported needs relating to sports, life outside the prison, finances, health, law, education, and training (p. 525). The information sources reported as most utilised were family and friends, followed closely by prison officers, and roughly a third of prisoners reported asking other prisoners, consulting books/newspaper, or consulting their lawyer for information (p. 525), and it was noted that less than five per cent indicated that they would ask the prison librarian for information (p. 525). When asked what barriers they faced when trying to access information, most participants reported that the main issue was a lack of access to computers and the internet (p. 526). Bajić draws no specific conclusions from findings of this study but recommends that prison administrations utilise the data presented to improve prison library services to ensure that prisoners' information needs are met (p. 526). While this study offers some insight into prisoners' information needs, this is limited due to the emphasis on exploring prisoners' reading interests and the unspecified demographics of participants which limits the generalisability of findings.

Canning and Buchanan (2019) examined the information behaviours of UK prisoners via semi-structured interviews with 12 adult male prisoners and 6 members of prison staff at one maximum-security prison in Scotland. The theoretical framework was provided via concepts drawn from Chatman's (1996) theory of information poverty (i.e. propositions regarding insider/outsider perspectives and self-protective behaviours) to explore factors influencing the meeting of prisoners' information needs. Thematic analysis of data followed Braun and Clarke's (2006) six stage approach and incorporated both deductive and inductive elements; i.e. taking a deductive approach where coding of data and themes was guided by concepts drawn from Chatman's (1996) theory of information poverty, but also an exploratory inductive approach to coding and identifying prisoners'

information needs, sources, and barriers in light of the lack of existing research in this area. Findings evidence information needs on topics such as education, health, prison routines, legal, finance, housing, and employment (p. 428). More sensitive emotional needs linked to emotional topics and coping with imprisonment are also identified (pp. 428-429). However, the authors note that the majority of such needs were alluded to in discussions but not described outrightly as needs by participants, and this was partially attributed to the restrictive social environment of the prison in which male prisoners may be reluctant to reveal needs associated with weakness and vulnerability (e.g. mental health, relationships, etc.) due to issues of hypermasculinity issues and also the possibility that such needs were "not yet fully formed or understood as information needs" by participants (p. 429). When seeking information to meet needs, participants reported a preference for interpersonal sources who were seen as non-judgemental and helpful, such as teachers and prison chaplains (p. 429). However, several factors negatively influenced interactions, including social and affective issues relating to distrust, fear of stigma, and low self-esteem, and complex access barriers connected to the security and operations of the prison (pp. 430-431). In response to issues, supporting propositions of Chatman's (1996) information poverty theory, prisoners exhibited a range of self-protective information behaviours, including secrecy and deception, which often left information needs unmet; particularly those of a sensitive nature. Findings therefore present important evidence of prisoners living in information impoverished circumstances. Canning and Buchanan (2019) argue that unmet sensitive information needs have the potential to negatively impact upon prisoners' abilities to cope with their imprisonment and to take fundamental steps towards rehabilitation (p. 432). While findings offer insight into the information needs of adult male prisoners, limitations of the study relate to the small number of prisoner participants (i.e. 12) and limited duration of fieldwork (which was conducted across a short span of three weeks). In light of this, the authors recommend "further research exploring issues of unmet emotional needs in prisoners, and in particular, assistive methods of need recognition and support in the problematic at-risk context" (p. 431).

In summary, this review of literature draws attention to the limited number of existing studies on prisoners' information needs and seeking behaviours and highlight that, of those which do exist, several provide limited evidence and/or lack participant demographic data (considered important as prisoners are not a homogenous group). Whilst information behaviour studies are limited (particularly involving prisoners), further insight can be gained from related fields. Therefore, search criteria were expanded in the following section to include literature which was not solely focused on prisoners' information needs and seeking behaviours.

2.5.2 Other relevant studies: prison libraries

A study by Omagbemi and Odunewu (2008) which examined the role of Nigerian prison libraries in meeting the information needs of prisoners appears to have been the catalyst for several related follow-on studies in recent years. Although focusing more on evaluating prison library services, these studies offer some insight into the information needs and seeking behaviours of prisoners. Again, studies are discussed in chronological order.

Omagbemi and Odunewu (2008) examined the role of Nigerian prison libraries in meeting the information needs of prisoners by surveying 62 prisoners ranging from under 20 to over 40 years (exact age range and sex unspecified) from four prisons in Nigeria. A range of information needs are identified, including those relating to current affairs, legal, religious, psychological, recreational, vocational, and educational needs; the most frequently reported needs related to education and current affairs, and the least frequently reported to recreational and vocational information (pp. 251-252). When surveyed on prison library services, 50% of participants reported that they felt prison library stock was inadequate to meet their needs (pp. 250-251). Notably, 70% of participants stated that they agreed information was important to the reformation and rehabilitation of prisoners (p. 251). The authors conclude by recommending that Library Associations visit prison libraries to "enlighten" prisoners on the benefits of information, that public libraries create outreach services to support prisoners following release, that prison library staff be given "adequate" training, and that library collections be "improved" and readership promoted to prisoners (pp. 252-253).

Eze (2014) examined the role of Nigerian prison libraries in meeting the information needs of prisoners by conducting focus groups with 1095 prisoners (age and sex unspecified) and surveying 21 prison library/welfare workers from five prisons in southeast Nigeria. Eze reports that prisoners experience information needs similar to those of "free people" but that only prisoners' legal and spiritual information needs appear to be met to some extent, with needs relating to education, vocation, recreation, health, and finance often not adequately met (p. 251). While many of prisoners' needs appeared to be connected to education and self-development, recreational information was felt to help prisoners cope with loneliness and boredom, and spiritual information was felt to help prisoners "change for the better spiritually and emotionally" thereby supporting their rehabilitation (p. 247). Eze concludes that the Nigerian prison service does not provide adequate library services to meet prisoners' information needs but does not offer any recommendations for improvement.

Tarzaan *et al.* (2015) examined the role of Nigerian prison libraries in meeting the information needs of prisoners by conducting surveying ninety prisoners (age and sex unspecified) at one medium-security prison in Nigeria. Tarzaan *et al.* report that prisoners experience legal, health, religious,

educational, recreational, and vocational information needs (p. 196). Several information sources with which prisoners interact are identified, including billboards/posters, television, lawyers, religious bodies, and prison wardens (p. 196). Some insight is offered into factors which inhibit access to information in the prison context, including high cost of information materials, high rates of illiteracy, unawareness of information services, local-language issues, and lack of prison library or other information service (p. 196). Again, Tarzaan *et al.* conclude that a large proportion of prisoners' information needs are currently not met and recommend that prisons improve information services to prisoners by further investing in the development of prison libraries in Nigeria (p. 198).

Emasealu and Popoola (2016) examined the role of Nigerian prison libraries in meeting the information needs of prisoners by surveying 335 male and 39 female prisoners (age unspecified) and conducting focus groups (participant numbers/demographics unspecified) from two prisons in Nigeria. Emasealu and Popoola report that prisoners have information needs relating to legal aid, continuing education, professional development, finance, health, and survival and coping with prison (p. 10). Participants reported that many library resources were difficult to access, including dictionaries, encyclopaedias, bibliographies, directories, maps, and novels (p. 11), and that such materials were often in poor condition, outdated, or irrelevant to prisoners' actual information needs (p. 13). Emasealu and Popoola conclude that a large proportion of prisoners' information needs are currently unmet by prison libraries in Nigeria and recommend additional funding to support prison educational programmes and to provide the information resources necessary to meet prisoners' needs.

Sambo *et al.* (2017) examined that role of Nigerian prison libraries in meeting the information needs of the prisoners by surveying 720 male and 41 female prisoners (age unspecified) and conducting interviews (participant numbers/demographic unspecified) at four prisons in Nigeria. Results include identification of information needs relating to health, finance, spiritualism, post-release information, the law, family/friends, education, human rights, and prison rules (p. 10). Prison library services were generally perceived as inadequate by prisoners, with the majority of participants reporting that they often addressed their needs instead through religious bodies, family or friends, or health professionals (p. 11). Several factors which prevented needs being addressed were identified, including lack of library funding, time restrictions on accessing sources, censorship, lack of professional staff, and poor staff training (p. 12). Similar to Eze (2014), Tarzaan *et al.* (2015), and Emasealu and Popoola (2016), the authors conclude that prison libraries do not meet the information needs of prisoners in Nigeria.

In summary, while these studies offer some insight into the information needs and seeking behaviours of prisoners, the utility of findings is limited. Findings are presented in a library-centric format (focusing on reading interests and evaluating library service provision). Notably, all studies are based in Nigeria and several lack participant demographic detail limiting the generalisability of findings.

There are also quality issues, such as the repetition of tables and translation errors in Tarzaan *et al.'s* (2015) paper, and limited evidence to support findings; e.g. despite incorporating mixed methods, only one quote is provided to evidence findings of Emasealu and Popoola (2016) and Eze (2014).

2.5.3 Overview of related work

In summary, a review of related work indicates that prisoners have information needs largely similar to those of the general public (e.g. relating to education, health, recreational interests) but also experience specific information needs relating to the daily prison regime and coping with their imprisonment (Campbell, 2005; Canning and Buchanan, 2019; Emasealu and Popoola, 2016; Nacro, 2009; Rafedzi and Abrizah, 2014). A range of information sources exist in the prison environment, but prisoners appear to exhibit a preference for interpersonal sources, and this is often attributed to inadequate information services; e.g. issues associated with the prison library (Bajić, 2015; Emasealu and Popoola, 2016; Eze, 2014; Omagbemi and Odunewu, 2008; Sambo *et al.*, 2017; Tarzaan *et al.* 2015). There is evidence of complex access barriers and internalised behavioural barriers impacting the meeting of prisoners' information needs; the former influenced by custodial policy and controls, the latter by restrictive social structures and norms, and issues of trust (Campbell, 2005; Canning and Buchanan, 2019; Chatman, 1999; Stevens, 1994). Overall, evidence suggests that prisoners often exist in information-impoverished circumstances, with many of their information needs unmet (Chatman, 1999; Nacro, 2009; Stevens, 1994), particularly those of a sensitive nature relating to emotional topics and coping with imprisonment (Canning and Buchanan, 2019). However, of the few studies exploring prisoners' information behaviour, numerous limitations impact on the generalisability/validity of findings, including unspecified participant demographics, lack of methodological detail and/or empirical evidence, or library-centric design providing limited insight into prisoners' information needs and seeking behaviours. In addition, despite often identifying issues of unmet need, few studies provide guidance on interventions which might help prisoners to address their information needs, with many simply recommending improvement of prison library services with little or no guidance as to how to achieve this (e.g. Bajić, 2015; Emasealu and Popoola, 2016; Omagbemi and Odunewu, 2008; Sambo *et al.*, 2017; Tarzaan *et al.*, 2015). As such, further research in this area is required to better understand prisoners' information needs and to explore how prisoners might be better supported to address these.

2.6 Chapter summary

This chapter presented a review of literature relevant to the research, beginning with an overview of the literature process. This is followed by a review of literature on the research context of the study

(i.e. prison) which reveals a current overarching emphasis on prisoner rehabilitation (Goffman, 1961; Ministry of Justice, 2010; Raynor and Robinson, 2009); the success of which often rests on adequate and appropriate information being available and accessible to prisoners (Egglestone *et al.*, 2018; Ministry of Justice, 2011; Scottish Government, 2015). Relevant theories and one model of human information behaviour which offer insight into the factors which influence the meeting of information needs are then discussed (i.e. Chatman, 1996, 1999; Taylor, 1968; Wilson, 1997) to establish a conceptual framework for exploring prisoners' information needs, interactions with sources of information, and issues influencing the meeting of their needs. A review of related work on the information needs and seeking behaviours of prisoners is them presented, which indicates that prisoners have information needs largely similar to those of the general public but also experience specific information needs relating to their imprisonment (Campbell, 2005; Canning and Buchanan, 2019; Emasealu and Popoola, 2016; Nacro, 2009; Rafedzi and Abrizah, 2014), and that prisoners' information needs are often unmet as a result of complex access barriers and internalised behavioural barriers (Campbell, 2005; Canning and Buchanan, 2019; Chatman, 1999; Stevens, 1994). However, this review highlights the various limitations of previous work, including small sample sizes, lack of data presented to support findings, and lack of generalisability due to the specific geographic and/or demographic context of participants. It is also noted that few studies provide guidance on interventions which might help prisoners address their information needs. Therefore, the need for further research to better understand prisoners' information needs and to explore how prisoners might be better supported to address these is evident. The next chapter outlines the methodological approach of the current study in seeking to address the existing research gaps in the literature.

Chapter 3: Methodology

3.1 Introduction

This chapter describes the methodological approach taken in the doctoral study. First, the researcher's previous MSc research which acted as a pilot study is discussed (*section 3.2*), then the aim, objectives and research questions are specified (*section 3.3*), followed by a discussion of the research paradigm (*section 3.4*) and theoretical framework of this study (*section 3.5*). The research design is then described (*section 3.6*), followed by data sample and recruitment methods (*section 3.7*), data collection methods (*section 3.8)*, and the data analysis process (*section 3.9*). The ethical considerations necessary to obtain permission to conduct this study from the Scottish Prison Service and University of Strathclyde are then discussed (*section 3.10*), followed by risk analysis and mitigation steps (*section 3.11*), and observations made by the researcher during fieldwork (*section 3.12)*. The chapter concludes with an overview of problems encountered during fieldwork and any necessary adaptations made in response to these (*section 3.13*).

3.2 Pilot study

Bryman (2016) explains that pilot tests are a fundamental step prior to fieldwork, as they allow researchers to evaluate the effectiveness and appropriateness of the research design at an early stage when any necessary adaptations can be made before any substantial time has been invested in data collection. Bryman explains that it is best to "find a small set of respondents who are comparable to members of the population from which the sample for the main study will be taken" when conducting pilot tests (2016, p. 261). As mentioned in the introductory chapter of the thesis, the researcher conducted a similar smaller-scale study of prisoners' information behaviours at HMP Shotts as part of a prior work which justified the need for further research in this area (see Canning and Buchanan, 2019). Although not originally intended as such, it was acknowledged that this previous work could act as a pilot study for the doctoral research. This is the reason for the adoption of similar research questions in the current study (see section 3.3) and is the reason for similarities in terms of theoretical and methodological approach where previous aspects of the MSc research design were deemed effective. The methodological approach of the pilot study is largely repeated in the doctoral work with several refinements to aid further exploration. Key areas in which prior work guided the doctoral study are threaded throughout relevant sections of this chapter (see sections 3.5, 3.7, 3.8, and 3.9).

3.3 Aim, objectives, and research questions

This study aims to better understand the information needs and seeking behaviours of prisoners, and to identify potential ways to support prisoners to address their information needs and consequently, improve their chances of successful rehabilitation. In view of this, this study seeks to address the following two research objectives:

1. To advance our understanding of prisoners' information needs and seeking behaviours.
2. To identify opportunities to better support prisoners to address their information needs.

To address the above objectives, four research questions are identified:

1. What are the information needs of prisoners?
2. What sources of information do prisoners use and why?
3. What issues influence the meeting of prisoners' information needs?
4. How can prisoners be supported to address their information needs?

3.4 The research paradigm

Specifying the research paradigm in which the research is situated is of vital importance as this guides the development of the research design and justifies the application of data collection and analysis techniques (Braun and Clarke, 2014). Ford (2015) defines the research paradigm as the approach (or perspective) adopted in research in response to the researcher's beliefs in three key areas: *ontology*, "what is the nature of reality?"; *epistemology*, "what is the relationship between the researcher and what is being researched?"; and *methodology*, "how can we find out about the phenomenon to be researched?" (p. 176). This section presents an overview of positivist and interpretivist epistemologies and the associated ontological positions, discusses phenomenology and the concept of lived experience, and describes the research paradigm of the current study.

It is important to note that, while discussed distinctly in this section, in the real world where human behaviour and perspectives are fluid and not easily defined by clear-cut epistemological and ontological boundaries, research can employ multiple and/or overlapping paradigms, particularly in large-scale studies which attempt to obtain both a *comprehensive* and *complete* understanding of studied phenomena (Kirkwood and Campbell-Hunt, 2007; Kivunja and Kuyini, 2017; Linn, 1998).

3.4.1 Positivism

Frequently adopted in natural science research, Bryman (2016) explains that the 'traditional' positivist paradigm takes an objectivist ontological position which implies that there is only one 'reality' which

exists independent of and outside of the influence of any observers and a positivist epistemological position in which only phenomena which can be observed and confirmed "by the senses" can be studied to produce new knowledge and valid theories (pp. 25-29). Porta and Keating (2008, p. 23) explain that from a positivist perspective:

> The world exists as an objective entity, outside of the mind of the observer, and in principle it is knowable in its entirety. The task of the researcher is to describe and analyse this reality. Positivist approaches share the assumption that, in natural as in social sciences, the researcher can be separated from the object of his/her research and therefore observe it in a neutral way and without affecting the observed object.

Therefore, in such an approach the researcher acts as detached observer as opposed to actively interacting with phenomena, and the methodological approach of the positivist paradigm is typically quantitative and deductive to reduce the likelihood of individual preconceptions and biases influencing data analysis and interpretation (Park *et al.,* 2020). Examples of social research data collection methods under the scope of this approach include large-scale surveys and structured interviews which limit the ability for the researcher to influence results (Bryman, 2016, pp. 164-165). However, while such objective testing of phenomena may yield findings more generalisable and resilient to scrutiny, the positivist approach may not be particularly useful for exploring the 'messier' aspects of life which are often variable and context-dependant (Ford, 2015, p. 178). Limitations of this approach include issues around identifying when data suggests correlation as opposed to casual relation between phenomena and the tendency for the often reductionist approaches in positivist research to result in a loss of detail and insight into social phenomena (Hammersley, 2013, p. 183). It is also acknowledged that in quantitative methods such as large-scale surveys, there is the potential for participants' responses to be random (particularly where surveys have been completed at speed to secure an incentive) which can result in inaccurate results being obtained (Huang *et al.,* 2012).

3.4.2 Interpretivism

In contrast to the positivist research paradigm, the 'post-modernist' perspective adopts an ontological position of constructivism, associated with interpretivism (discussed below), which implies the existence of multiple 'realities' which are specific to the context in which individuals live (i.e. their situation), and purports a view of the world in which social order is in a constant state of revision, ultimately influenced and constructed by the social actors (i.e. individuals) who live within it (Bryman, 2016, p. 30). Creswell (2013, pp. 23-24) explains that in a constructivist perspective:

> […] individuals seek understanding of the world in which they live and work. They develop subjective meanings of their experiences—meanings directed toward certain objects or

> things. These meanings are varied and multiple, leading the researcher to look for the complexity of views rather than narrow the meanings into a few categories or ideas. The goal of research, then, is to rely as much as possible on the participants' views of the situation. Often these subjective meanings are negotiated socially and historically.

This position takes an interpretivist epistemological stance, asserting that phenomena can be effectively studied to produce new knowledge in such a way that the researcher is essentially a part of the research themselves, interacting with the phenomena and interpreting data, and as such, cannot remain objective and detached (Ford, 2015, p. 177). In line with these beliefs, the methodological approach of the interpretivist paradigm is typically qualitative and inductive, enabling the researcher to interact with phenomena and utilise their own prior knowledge and experiences to better understand participants' perceptions of reality and the contextual influences which shape their worldview and behaviours (Creswell, 2013, p. 25). Examples of social research data collection techniques under the scope of the interpretivist approach include methods such as an extended ethnographical observation and intensive one-to-one interviews which enable the researcher to develop a deeper understanding of the social world of the phenomenon (Bryman, 2016, p. 624). However, in comparison to the positivist approach, research framed by an interpretivist paradigm is often more subjective and therefore subject to issues of bias, and the generalisability of findings can be limited by smaller sample sizes due the researcher having to personally engage with the phenomenon being studied (e.g. interviewing participants) (Cohen *et al*., 2011).

3.4.3 Phenomenology and the concept of lived experience

Linking to research paradigms based on interpretivist epistemologies and advocating for the active role of the researcher in the investigation of phenomena, Mapp (2008) explains that 'phenomenology' (synonymous with the concept of 'lived experience') was first developed as a philosophical method of inquiry by the German philosopher Edmond Husserl (1859 - 1938) in response to his dissatisfaction with the ability for scientific positivist approaches to permit understanding of human phenomena (p. 308). Described as transcendental (descriptive) phenomenology, this approach aims to better understand specific human phenomenon via exploration of the perceptions of individuals with lived experience, often via qualitative methods such as interviews which can yield meaningful depth of insight (Neubauer *et al.,* 2019) but with the researcher separating their personal beliefs about the phenomena being studied during analysis (Walters, 1995). In contrast, one of Husserl's students, Martin Heidegger (1889 - 1979), developed his own approach known as Hermeneutic (interpretive) phenomenology, which advocates for the more active involvement of the researcher in the interpretation of data; emphasising the value of the researcher utilising their prior knowledge and experience to understand participants' experiences (Neubauer *et al.,* 2019, p. 92). This approach has

more recently been described as Interpretive Phenomenological Analysis (IPA) which aims to examine lived experience of a phenomenon via exploration of participants' personal experiences and perceptions with the researcher taking an active role in the interpretation of data (Tuffour, 2017).

Regardless of specific approach, several authors in the LIS field have advocated for a phenomenological approach to exploring information behaviour. For example, Wilson (2003) describes phenomenology as a valuable 'conceptual tool' for exploring information behaviour given that this approach "relates to understanding meaning in social interaction and in individual actions in the world" (p. 450), can be used to establish an understanding of how problems are perceived by the affected individual prior to the deployment of larger-scale data collection techniques to investigate generalisability, and allows the research to be grounded philosophical framework which guides the research design and conveys the importance of this to research students (p. 451). Budd (2005) also suggests a phenomenological approach based on the exploration of participants' lived experience and associated concepts such as perception, intentionality, and interpretation as valuable in framing and guiding the design of research which seeks to explore information seeking behaviour and how individuals evaluate the relevance of information to their personal situations. Savolainen (2008) adopts a phenomenological approach in his examination of the link between individuals' everyday life experiences and their information behaviours, conceptualising the resulting 'information practises' as largely defined by social and cultural environmental characteristics in which individuals live (p. 5).

3.4.4 The research paradigm of the doctoral study

In view of previous discussion regarding benefits and drawbacks of these various approaches and the doctoral work's aim to better understand prisoners' information need and seeking behaviour with an emphasis on depth of insight, the research paradigm of the current study is most associated with a post-modernist perspective adopting a 'constructivist' ontological approach and 'interpretivist' epistemological approach. The ontological approach of the current study is constructivist in light of the researcher's desire to explore the various 'realities' of participants and their subjective experiences of information within the specific context of the prison given the acknowledge that even in this shared small-world context, the lived experience of imprisonment could vary greatly between participants given that diversity of the prisoner population (e.g. age, ethnicity, social and economic background, etc). The epistemology of the research is interpretivist as the researcher wanted to emphasise participants' personal perceptions and experiences of information to yield depth of insight into how prisoners understand their information needs, how they respond to psychological, social, and environmental factors which influence interaction with sources of information, and any issues they perceive as hindering the meeting of their needs. The researcher felt that this would be best explored through a phenomenological perspective given that lived experience would be crucial to

understanding the influence of prison life on prisoners' information behaviour. The researcher also wished to utilise and apply their own prior experience of working and conducting research in prisons (and subsequent understanding of social norms and prison colloquialisms) to the interpretation of data to facilitate a deeper understanding of the lived experience prisoners were trying to communicate. This study therefore utilises interpretive phenomenological analysis to examine how prisoners' lived experience influenced their information behaviours, with the researcher taking an active role in the interpretation of data. Qualitative methods enabling the researcher to build trust and interact with the phenomenon being studied (i.e. prisoners and their experiences of information) and which would place an emphasis on participants' perspectives were considered appropriate, and one-to-one semi-structured interviews were identified as an appropriate data collection tool. The research design and data collection methods are discussed further in section in 3.6 and 3.8.

In light of the limited guiding literature on the topic of prisoners' information needs and seeking behaviours and lack of a pre-specified conceptual codebook, the data analysis process of the doctoral work was largely inductive in line with the interpretivist paradigm. However, Braun and Clarke (2020) argue that inductive and deductive approaches to data analysis should not be exclusively associated with certain epistemologies and that in reality, analysis often incorporates a combination of both approaches. In agreement, Bryman (2015) states that even in an inductive approach, it is unlikely that researchers will be able to ignore pre-existing knowledge of relevant theories or concepts during the analysis process and this this will ultimately add a deductive dimension to the analysis process (p. 580). With such arguments in mind, it was noted that the researcher's consideration of their research questions during analysis, engagement with relevant literature prior to analysis, identification of guiding concepts drawn from a theoretical framework, previous research on the same topic, and personal experience of working within prisons and with prisoners would influence their interpretation of data. As such, it was acknowledged that the data analysis process, whilst largely inductive, would also incorporate deductive elements. This was not considered a weakness of the research, as inductive approaches to analysis are recognised as lacking the structure and direction provided by deductive approaches which utilise a specific theoretical lens to guide coding of data, and solely deductive approaches to analysis are recognised as having the potential to blinker the researcher resulting in an interpretation of the data set which lacks depth of insight (Braun and Clarke, 2020). Adopting a mixed approach therefore utilised the strengths of both approaches while minimising the weaknesses of each. Data analysis and interpretation is discussed further in section 3.9 of this chapter.

3.5 Theoretical framework

Following a review of related literature, a theoretical framework incorporating relevant theories and a model of information behaviour was established to inform the current research design. One key difference between the pilot study and doctoral work is the expansion of theoretical framework beyond Chatman's (1996; 1999) theories of information poverty and life in the round to incorporate Wilson's (1997) Revised General Model of Information Behaviour to further explore the influence of context (particularly sensitising aspects of the prison environment) on prisoner's information behaviour, and Taylor's (1968) Question-Negotiation theory to further investigate recognition issues evidenced to a limited degree in findings of the prior work. An overview of the theoretical framework is presented below (for more detailed discussion see section 2.4).

3.5.1 Wilson's (1997) Revised General Model of Information Behaviour

Wilson's (1997) model draws not only from information science but also fields such as decision-making, innovation, psychology, health communication, and consumer research. This model attempts to present the complex relationship between contextual and cognitive factors which influence an individual's motivation to address information needs and explores factors which influence individuals' selection and use of specific information sources and subsequent seeking behaviours. It is therefore considered an appropriate macro-model within which other theories can be nested to explore the contextual influences of prison life on information behaviour. This model recognises four distinct types of information seeking behaviours, including passive attention, passive search, active search, and ongoing search. Adopted by Campbell (2005) in a review of literature on prisoners' information behaviour, there is significant room for expansion upon previous findings. The current study draws upon the intervening variables and theories (i.e. stress/coping, risk/reward, and social learning) nested within Wilson's (1997) model and nests other theories of information behaviour within this macro-model (discussed below) to explore factors which influence prisoners' information behaviour.

3.5.2 Chatman's (1996; 1999) Information Poverty and Life in the Round theories

Chatman's (1996) theory of information poverty is based on ethnographic studies exploring the information behaviours of female janitors, single mothers, and elderly women. Chatman explains that in information-impoverished circumstances, individuals are "unable or unwilling to solve a critical worry or concern" and instead often attempt to mask or distort their needs due to the perceived risks of seeking and/or sharing information to address these (p. 197). Four key self-protective behaviours indicative of an information-impoverished environment are identified by Chatman, including: *secrecy*, hiding one's true condition by guarding against disclosure; *deception*, hiding one's true condition by giving false or misleading information; *risk-taking*, weighing up risks of seeking/sharing information

against potential gains, and; *situational relevance*, evaluating whether information is relevant to one's own situation (pp. 195-202). Chatman's (1999) subsequent work on 'life in the round' builds on this earlier theory to explore how the small world of the prison contributes to a state of information impoverishment amongst prisoners, and describes four key features of small worlds which influence information behaviour, including: *social norms*, codes of behaviour which dictate what is normal and accepted and what is not; *social types*, characteristics which distinguish individuals from other groups, and; *worldview*, a system of beliefs held by all members who live in the small world (pp. 213-214). The current study utilises concepts drawn from Chatman's (1996; 1999) theories of information poverty and life in the round to explore the contextual influence of the prison environment on prisoners' information behaviour and factors which inhibit the meeting of information needs; offering further insight into the context of need and influencing factors presented in Wilson's (1997) model.

3.5.3 Taylor's (1968) Question-Negotiation Theory

Taylor's (1968) question-negotiation theory proposes that an information need may exist at four levels on the way to being articulated to a system or other individual: 1. *visceral* - the actual, but unexpressed need for information; 2. *conscious* - the conscious, within-brain description of the need; 3. *formalized* - the formal statement of the need, and; 4. *compromised* - the question as presented to the information system. While the latter three levels indicate recognition of an information need (even if poorly understood), Taylor explains that the 'visceral' initial conception of information need is only experienced by individuals as "a vague sort of dissatisfaction" (p. 182). If the information need progresses to a 'conscious' level, that is, recognised but still ill-defined, there is potential for other parties to assist in understanding and articulation of the need, highlighting a potential key zone for external intervention. This study draws upon the levels proposed in Taylor's (1968) theory to explore factors which influence recognition and articulation of prisoners' information needs to identify areas where prisoners may potentially benefit from support in addressing their information needs.

3.6 Research design

Given the subject matter of the research (i.e. the information needs and seeking behaviours of prisoners) and aims and objectives of this study, it was considered important to obtain data which would provide in-depth understanding of prisoners' personal experiences of information. The limitations of quantitative methods for collecting data which can offer depth of insight into prisoners' information needs and behaviours is recognised, with such techniques not permitting emotional and behavioural exploration of topics with participants (Queirós *et al.*, 2017). As such, a qualitative methodological approach utilising qualitative data collection techniques was adopted in this study to

place emphasis on participants' perspectives and life experiences to capture data which would offer depth of insight into prisoners' information needs and seeking behaviours.

One key consideration in arriving at the research design was how to obtain detailed qualitative data which would offer insight into the lived experience of participants given the various difficulties of conducting research in prisons and with prisoners. For example, Liebling (2014) reflects on the challenges the prison environment poses to the researcher (p. 482):

> There is something extraordinarily difficult about getting to know a prison, from the lengths one has to go to, to get in (18 locked gates, a requirement to undergo personal protection training, and a daily search), to organizing each interview or group discussion (names checked with security, a deal struck to count the discussion as "purposeful activity," an unwilling wing officer), to the staggering effects of hearing the words from a 32-year-old, "I'm doing natural life, Miss."

Liebling (2014) goes to on to add that even after negotiating these various obstacles, issues of trust may further complicate prison research, with researchers potentially facing questions such as "Whose side are you on?" or "What's in this for us?" from both prisoners and prison staff (p. 484). Similarly acknowledging this issue, Bosworth *et al.* (2005) ask, "Trust has to be built, but how? How do researchers connect with someone who has been shut out from the world for years or someone who knows he or she will not be released any time soon?" (p. 255).

To obtain detailed qualitative data, the research design was developed with an emphasis on methods which would support the building of trust with participants. The final research design involved one-to-one repeat (where possible 2-3) interviews with 24 adult male prisoners from one Scottish prison across a span of 12 months. Interviews were semi-structured as the researcher wanted to allow participants the ability to guide interview discussions and to avoid limiting discussions to specific topics, enabling the collection of data on a broad range of topics (including those which could be inherently and/or contextually sensitive, and which participants might be reluctant to discuss if not of their own accord). Participants were reassured prior to, during, and after interviews that all conversations would remain confidential unless the safety and/or security of others or the prison was threatened and informed that they would be able to request that any data collected be redacted up until the point of the thesis being made publicly available following submission. All participants were given a verbal walkthrough of the purposes of the research and the use of any collected data. An unused classroom in the prison learning centre which offered privacy was selected as the interviewing location; only the researcher and participant were present in the room during interviews, but a prison officer remained near the room should the researcher need to call for assistance at any point but not

close enough that they might overhear interview discussions. Such careful considerations in how data collection was conducted allowed the researcher to establish trust with participants, enabling collection of data offering depth of insight into prisoners' lives and personal experiences of information. Data collection techniques are discussed further in section 3.8.

A series of focus groups with small groups of prisoners was initially considered as a means of triangulating and building upon findings from interviews, but it was acknowledged that incorporating focus groups into the research design could potentially have a detrimental impact on recruitment for interviews as potential interview participants might be reluctant to take part knowing that interview data (i.e. anonymised quotes or narratives) might be discussed with other prisoners in a group setting at a later period. Additionally, given the risk that even small details may be telling in this small world context, it was felt that anonymising data could not fully protect the identifies of interview participants and as such, focus groups were not utilised in the final research design.

3.7 Data sample and recruitment methods

The research design involved interviewing a sample of 24 adult male prisoners who were engaged with the learning centre (to some extent) at one prison in Scotland. Further details are provided below (with limitations of the sample discussed in chapter 6 of the thesis).

3.7.1 Participants

Key participant inclusion criteria were determined based on the lack of indicative literature exploring the information needs and seeking behaviours of adult male prisoners (see chapter 2); who currently represent 93% of the total prisoner population in Scotland (Carnie and Broderick, 2019, p. 2). Approval was granted to conduct the current study at a maximum-security prison in Scotland, HMP Shotts, which holds approximately 500 adult male prisoners serving sentences of four years or more (Scottish Prison Service, 2021a). The population group of the doctoral study (adult male prisoners) reflects that of the pilot study and fieldwork was conducted at the same prison due to the stable prisoner population it offered, the researcher's familiarity with staff and operations at this prison, and the potential to building upon findings of the prior work (see Canning and Buchanan, 2019). In total, eleven participants from the original MSc study volunteered to take part in the doctoral research (this was coincidental as the recruitment of participants was not conducted to purposefully seek out previous participants). It was acknowledged that these participants were likely to possess a greater understanding of key concepts and to have benefitted from time to reflect upon their previous participation (this is discussed further in 'limitations' section 6.4.1 of the conclusions chapter). One key methodological difference between the pilot and doctoral studies is the lack of staff participants

in the current research; the decision to include only prisoner participants was made in light of the researcher's desire to place emphasis on prisoners' personal experiences of information and to avoid any suggestion that such experiences required verification by staff members (it was noted that some participants of the prior work expressed dismay at the involvement of staff in data collection due to the perception that their statements could be discredited by staff).

3.7.2 Sample size

A sample size of 24 is considered appropriate in research which aims to obtain detailed qualitative data (Crouch and McKenzie, 2006). However, attempts were made to recruit above this number to minimize the impact of any potential participant drop-outs. It was anticipated that repeat interviews with 24 prisoner participants would present a variety of prisoner viewpoints, providing sufficient empirical data to evidence findings and present a degree of data saturation (Bryman, 2016). This sample size was also considered realistic given the researcher's goal to complete fieldwork within 12 months given various time-constraints (e.g. transcription of interviews, travel to and from the prison, and the prison regime restrictions) and the resource demands placed on the hosting institution throughout the duration of fieldwork (e.g. the use of classrooms as interview rooms, the need for staff escorts, and the frequent review and updating of security clearance). While the doctoral study includes a greater number of participants (24 as opposed to 12 in the pilot study), the current research was developed not merely to conduct a repeat study involving a greater number of participants, but with an emphasis on methods which would yield greater depth of insight into key findings of the prior work; particularly those evidenced to a limited degree but warranting further investigation given potential consequences for prisoners' wellbeing and rehabilitation (such as sensitive information needs). These methods are discussed in sections 3.6 and 3.8.

3.7.3 Recruitment methods

Recruitment adhered to standard ethical procedures of informed consent and followed a similar recruitment process to the pilot study, with participants recruited from the prison learning centre as this approach was found previously to work well. The prison learning centre offered a pragmatic route for recruitment, as prisoners and operational staff were already present, placing few additional resource demands on the hosting institution. It is acknowledged that the recruitment strategy further refines the sample as all participants were engaged with the learning centre to some extent at the time of the study. The researcher obtained permission to visit and display notices to disseminate details of the research in the learning centre in the month prior to the start of interviews; notices remained on display throughout the 12-month duration of fieldwork as recruitment was an ongoing process. Notices followed a standard information sheet format (see appendix 1), outlining participant

inclusion criteria and emphasising participation as voluntary and as having no impact on prison progression processes. No payment, compensation, or other incentive was offered to participants.

3.8 Data collection

Qualitative semi-structured interviews were identified as a suitable data collection technique given the aim of this research to conduct an in-depth exploration of prisoners' personal feelings, experiences, and perceptions of information. Further details and justifications for this method are provided below (with limitations of the data collection method discussed in chapter 6 of the thesis).

3.8.1 Repeat interviews

To enable an in-depth exploration of prisoners' information needs and seeking behaviours, the formation of trust between the researcher and participants was considered crucial. Repeat interviews are recognised as a valuable tool in allowing researchers to build trust with participants and considered particularly appropriate for research that deals with vulnerable populations and/or sensitive issues (Vincent, 2013), and one key methodological difference between the pilot and doctoral studies is the repetition of interviews in the doctoral research. This allowed participants time to reflect between interviews and the opportunity to expand upon and/or redact information from previous discussions and permitted time for trust and a rapport to be established between the researcher and participants, assisting in the exploration of sensitive topics (e.g. emotions) during interviews. The researcher aimed to conduct two to three interviews with each participant where possible to support to the building of trust which would be essential to permitting exploration of topics which might be inherently and contextually sensitive within the prison. In total, 52 interviews were conducted with 24 participants; this included single interviews with 4 participants, two interviews with 12 participants, and three interviews with 8 participants. Bryman (2016) estimates that one hour of recorded data will take five to six hours to fully transcribe into a written format (p. 481). In consideration of the volume of interview audio data gathered (totalling over 21 hours) and time necessary to conduct full transcription, a maximum of two interviews were scheduled each week to enable transcription shortly after interviews while the content of interviews was still fresh in the mind of the researcher allowing additional context (e.g. atmosphere or events surrounding the interview) to the added where necessary to interpret interview data meaningfully.

3.8.2 Informed consent

Before interviews were conducted, participants were given an information sheet (see appendix 2) containing an explanation of the research in which they were participating, use of the data gathered,

and expected outcomes and this was accompanied by a step-by-step oral discussion by the researcher to ensure comprehension. Participants were informed that they could withdraw from the interview process at any point and had the right to request all data gathered thus far be erased. They were also be given the option to consent to audio-recording or request that interviews be recorded through written notation only. Participants were then presented with a copy of consent form (see appendix 3) which they read (again, with verbal guidance from researcher to ensure comprehension) and signed if acceptable; this was retained by the researcher as proof of informed consent.

3.8.3 Questionnaire

Prior to the outset of interviews, participants were guided through a questionnaire (see appendix 4) designed to capture demographic details including basic details of the sample (i.e. age, gender, sexual orientation, and ethnicity), information about participants' prison sentences (i.e. length of sentence, time remaining on sentence, nature of crime, and details regarding any previous sentences served), and social and economic background (i.e. education, employment, accommodation, relationships, and parental status). These demographic details are presented as descriptive statistics at the start of the chapter 4 to permit comparison of this study's sample to that of other studies on prisoners' information behaviour and to highlight any limitations on the generalisability of findings to other prisoner demographic groups (limitations are discussed in chapter 6 of the thesis).

3.8.4 Interview schedule

A semi-structured approach to interviewing was considered appropriate for the purposes of the current research as this approach offers greater flexibility than structured interviews, the potential for both exploratory and reflective discourse, and places an emphasis on the participant's perspective (Bryman 2016, p. 468). Similar to the pilot study, interviews in the doctoral work were semi-structured and conducted with the aim of exploring three key themes (i.e. prisoners' information needs, sources of information, and issues influencing information behaviour). An interview schedule (see appendix 5) was developed to guide interview discussions; initial interviews were conducted with the aim of building trust between the participant and researcher and exploring prisoners' general information needs, while subsequent interviews explored factors influencing interaction with sources of information and any issues influencing the meeting of information needs. Potential topics for discussion were viewed as wide-ranging based on previous studies; e.g. ranging from prison routines to education to health and general wellbeing. A Likert rating scale was used as a prompt in interviews to encourage prisoners to reflect on the importance and immediacy of their information needs (on a scale of 1 to 5) to add further depth of insight to data (see appendix 6). However, participants' responses to this scale are not presented in the thesis as this was used rarely with many participants

discussing these aspects of their needs naturally and given the emphasis of this study on presentation of qualitative as opposed to quantitative data. Participants were given some opportunity to guide conversations to encourage narrative discourse and permit identification of related topics previously unknown to the researcher (Kawulich, 2010), but this was permitted only where topics remained relevant to the current study. Where prisoners attempted to discuss inappropriate topics (e.g. unwarranted/detailed accounts of their crime), they were directed towards other topics by the researcher and advised that interviews would be ended if inappropriate discussion continued.

3.8.5 Debriefing periods

Debriefing periods were not audio-recorded, although, in certain cases and with permission from the participants, notes were taken during these periods (e.g. some participants consented to audio-recording of interviews but wished to share further information to be captured only as notes). During this period, participants were given the opportunity to ask questions, request disclosures made during interviews be omitted from analysis, and/or rescind permission to data collected thus far. A debriefing sheet (see appendix 7) was provided to participants following interviews, containing a summary of the research they had taken part in and providing signposting to prisoner support services if required.

3.8.6 Duration

The majority of interviews lasted approximately 60 minutes; consisting of a core 40-minute interviewing period, bookended by an initial 10-minute introductory period and a 10-minute debriefing period at the end. The main audio-recorded (or written) portion of interviews lasted on average approximately 40 minutes, with duration and content guided by the participant. The maximum duration of any interview was limited to 75 minutes in consideration of the prison regime and resource demands placed on the hosting institution. No minimum duration was set for interviews as participants were free to request that interviews end at any time.

3.8.7 Location

Dawson *et al.* (2017) found that custodial interview settings (e.g. small room size, lack of natural light or wall décor, etc.) can have a detrimental impact on the formation of a positive interpersonal relationships and inhibit the extent to which participants are willing to disclose information (p. 333). As learning centre classrooms are often less custodial in design than formal interviewing rooms in the prison and participants of this study were familiar with this environment, this setting was felt to be conducive to establishing a rapport and building trust with participants. As such, interviews were conducted in classrooms (most frequently an unused classroom) in the prison learning centre; this was subject to class timetables and room bookings. With consent from learning centre staff, prisoners

were interviewed at times when they were already scheduled to be in the learning centre for classes, minimising the need for additional staffing for prisoner escorts and security checks. To minimise disruption to prisoners' education, efforts were made to ensure that participants were not taken away from important classes or assessments and the researcher always requested permission from learning centre staff before scheduling interviews with any prisoner participants.

3.8.8 Equipment

The researcher brought a folder to interviews containing copies of the interview schedule, participant information sheet, consent form, demographic questionnaire, Likert scale, and debriefing sheet. The researcher also brought a Dictaphone which was used to record the main portion of the interviews (subject to participants' permission) to enable verbatim transcription. These items always remained in the researcher's possession to ensure data security. Audio-recording of interviews (as opposed to written notation) enabled the researcher to focus on posing questions, tracking interview progress, and showing interest in the conversation (Bryman, 2016, p. 480). Audio recording also ensured that no details were missed, as anything said in interviews which could have been missed by the researcher could be discovered later during transcription. The researcher also carried a pen and notebook to take notes in case the Dictaphone failed to function or the participant did not wish to be audio-recorded.

3.9 Data analysis and interpretation

Data analysis was an ongoing process throughout the duration of fieldwork and followed Braun and Clarke's (2006) six steps approach as this was found to work well in the pilot study. While initially developed for use in research incorporating a range of ontological and epistemological views, the authors have recently reassessed the suitability of this approach in work conducted under positivist paradigms and it is now considered most appropriate in work under interpretivist constructivist paradigms (Braun and Clarke, 2019; 2020). Braun and Clarke's (2006) approach provides a method for analysing data under the guidance of a clear and easy-to-follow format (describing in detail six stages of analysis) which can be utilised in research across a range of fields and which aids the researcher in identifying and qualitatively analysing themes in any given set of data (Braun and Clarke, 2014). Utilising this approach in the current research offered a structured and organised method for conducting thematic analysis while also permitting flexibility within particular stages; e.g. the researcher utilised Microsoft Excel software to collate codes into themes but also used more rudimentary methods, such as mind-mapping of emerging themes using sticky notes, to engage in more creative and spontaneous exploration of patterns and themes.

One of the strengths of Braun and Clarke's (2006) approach is the ability for the researcher to play a subjective role in the coding of data, drawing upon their pre-existing knowledge and understanding of the phenomenon being studied to yield deeper insight into the meaning of participants' words; as opposed to an objective approach which would limit interpretations of data to what has explicitly been said by participants (Braun and Clarke, 2019). However, potential issues of bias around subjective interpretations of data are acknowledged as a limitation of the sole researcher in the PhD context. Another strength is the useful direction provided by this clear six-step process, which not only presents a logical order for approaching data analysis, but also provides detailed guidance to researchers on how to conduct analysis at each of these stages (Braun and Clarke, 2013). It is important to note that the discrete separation of these six stages serves only to guide the researcher through the analysis process as actual analysis of data is unlikely to proceed in a linear fashion through these phases, and Braun and Clarke (2020) explain that analysis should instead be viewed as a recursive and iterative process where the researcher will move between stages in response to outcomes at various stages; e.g. reviewing of themes in stage 4 may require the researcher to revisit codes initially generated in stage 2. One drawback of this approach is that the iterative process of moving between the different stages can often be time-consuming (Byrne, 2022, p. 1398). Despite this, the researcher considered this approach justifiable given that the iterative approach would ensure a thorough and rigorous approach to refining the key categories and themes evident in data.

Below is an overview of each of the six stages of Braun and Clarke's (2006) approach to thematic analysis discussed within the context of the current study, with specific examples of decisions made at each stage presented to offer the reader insight into the reflexive and iterative process of analysis.

3.9.1. Familiarizing yourself with your data

Braun and Clarke (2006) advise researchers that regardless of their level of involvement in the data collection process, the vital first stage of the analysis process is to "immerse yourself in the data to the extent that you are familiar with the depth and breadth of the content" which can include repeated reading of the data (e.g. interview transcripts) (p. 87). In the current study, the researcher personally conducted full transcription of the audio recordings of interviews as opposed to outsourcing given the sensitive nature of the research (i.e. involving maximum-security prisoners). This enabled transcription of data shortly after interviews helping the researcher to recall key themes and add any additional context from notes (e.g. interruptions to interviews). Additional information drawn from close listening of interview audio was incorporated into transcripts using asterisks to signify non-speech such as laughter or a change in tone indicating sarcasm. Incorporating this additional data provided further context to discussions by highlighting any potential discrepancies

between words and meaning (e.g. use of sarcasm). Audio recordings were initially transcribed into a Microsoft Word Document and then transferred into a Microsoft Excel Spreadsheet titled 'Full Transcripts' to permit organisation of the data. Following this, the researcher created a second Microsoft Excel Spreadsheet titled 'Anonymised Transcripts' and repeatedly read transcripts to conduct data anonymisation, removing any information which might potentially identify participants or other individuals described in interviews such as prison staff or family members (e.g. names, ages, locations, and dates). This re-reading also helped the researcher reflect upon and better familiarise themselves with the content of interviews to begin searching for patterns within the data.

3.9.2. Generating initial codes

The second stage of the analysis process is entered once the researcher has familiarised themselves with the data and formulated some initial ideas about what the data is describing and why this is interesting as the next step involves organising data into meaningful groups referred to as "codes" (Braun and Clarke, 2006, p. 88). To create an organised method of tracking emergent codes, a 'notes' column was added to the 'Anonymised Transcripts' spreadsheet to record initial ideas and summaries. These notes were revisited during subsequent readings and restructured, following a simplistic 'needs, sources, and issues' outline drawn from the study's research questions. Following the first full iteration of coding, relevant coded data extracts were transferred to Microsoft Excel spreadsheets titled 'Coding of Information Needs', 'Coding of Sources', and 'Coding of Issues'. Coding of data produced typologies of information need, information sources, and issues influencing prisoners' information behaviours, which presented a more structured approach to coding and permitted an overview of the frequency and length of data extracts relating to each code. During subsequent iterations, some initial codes assigned to data were reviewed and found to occur too infrequently and/or to lack the depth required to justify an individual code. For example, information needs coded as 'fitness', 'injury', and 'medical conditions' were designated sub-codes under the broader coding category of 'physical health'. Codes which did not apply to more than a few data extracts and did not appear to fit within any of the broader coding categories were coded as 'miscellaneous' in case they proved to be of significance at a later stage of analysis.

3.9.3. Searching for themes

In this stage, the codes generated from analysis of the data set in stage two were sorted into potential themes which are much broader in scope than individual codes and describe categories in which a shared characteristic is evident in data extracts. As Braun and Clarke (2006) explain, "Essentially, you are starting to analyse your codes and consider how different codes may combine to form an overarching theme" (p. 89). The phase was crucial to construct a narrative and evidence arguments

which would form the main contribution of this research to the LIS field. A 'Theme' column was added to original coding spreadsheets to allow the researcher to track the emergence and prevalence of themes within/across specific codes. Identification of themes was both an inductive and deductive process; inductive whereby a common theme was found to emerge from analysis of coded data extracts across multiple coding categories (e.g. the theme of 'lived experience' was found to emerge from analysis of data extracts discussing prisoners as an information source), and deductive whereby the theoretical framework and researcher's existing knowledge and/or experiences in the prison guided identification of themes (e.g. the theme of 'recognition issues' drawn from Taylor's (1968) question-negotiation theory was found to apply to several data extracts across the entire data set).

3.9.4. Reviewing themes

Braun and Clarke (2006) explain that the fourth phase involves a two-step process of reviewing and refining themes; the first step, reviewing, involves checking extracts coded under each theme for a coherent pattern, and the second step, refining, involves considering whether themes appear logical in relation to the entire data set and reflect the 'meanings' inherent in the data (p. 91). During this stage, the themes applied to coded extracts were checked for appropriateness and consistency of application; i.e. when considered collectively, did the data extracts coded under a particular theme follow a consistent pattern or were there discrepancies? An example of changes made during this stage include the amendment of the theme of 'escapism' which was mapped to many data extracts coded under the issue category 'drug addiction'. When considered in relation to the theoretical framework of the study, it was felt that 'escapism' was a sub-theme of an overarching 'stress/coping' theme (drawn from Wilson's (1997) Revised General Model of Information Behaviour). Mapping the theme of stress/coping across the data set yielded a coherent pattern demonstrating that it was valid as a key theme which could offer valuable insight into the link between unmet information needs and prisoners' strategies for coping with stress-inducing issues, helping to address RQ3: what issues influence the meeting of prisoners' information needs?

3.9.5. Defining and naming themes

In the fifth stage of analysis, themes are further defined and refined which Braun and Clarke (2006) explain involves "identifying the 'essence' of what each theme is about (as well as the themes overall) and determining what aspect of the data each theme captures" (p. 92). During this stage, themes were defined (i.e. assigned proper names) and further refined (i.e. sub and/or overarching themes were identified). For example, the theme 'difficult to address' was initially applied to several data extracts coded as under the general grouping 'information needs', but after reviewing extracts under this theme, irreconcilable differences in the reasons for this difficulty were identified, suggesting the need

for distinct themes; e.g. some needs appeared difficult to address because they pertained to topics which were seen as 'taboo' in prison (e.g. mental health), while others appeared difficult to address because the information required to resolve them was restricted by access issues (e.g. lack of internet). This resulted in the refinement of the 'difficult to address' theme into distinct 'sensitive information need' and 'access issue' themes. Identification of these distinct themes helped the research address two research questions as opposed to one by identifying sensitive information needs offering further insight into the information needs of prisoners (relevant to RQ1), and problems accessing information offering insight into issues influencing the meeting of prisoners' information needs (relevant to RQ3). The theme 'sensitive information need' was considered appropriate for extracts coded under this theme as this was felt to be short and succinct while giving the reader the clear sense that such needs were considered inappropriate for discussion within the prison context.

3.9.6. Producing the report

This final phase involves checking the coding and thematic framework constructed in previous stages and selecting data extracts to be presented in the thesis. Braun and Clarke (2006) emphasise the importance of ensuring that data provided to readers is sufficient to evidence themes and presented in such a way that it is "concise, coherent, logical, non-repetitive and interesting", recommending the presentation of "particularly vivid examples or extracts which capture the essence of the point you are demonstrating, without unnecessary complexity" (p. 93). This was challenging given the volume of valuable empirical data provided by participants on key themes (e.g. 46 quotes were identified which evidenced information needs relating to 'mental health' and of these, 16 also demonstrated the theme 'sensitive information needs'). To make selection of data extracts simpler, beyond looking for particularly vivid and compelling quotes, the researcher sought out extracts which were not overly long in length but sufficiently demonstrated themes. Where data extracts presented valuable evidence but were repetitive (e.g. two participants describing a similar experience of addressing an information need on the same topic), the researcher attempted to select the one considered most compelling and succinct. The researcher chose to present quotes unaltered to accurately represent the voice of participants; i.e. no attempts were made to correct misspoken words, grammatical errors, offensive language, or colloquialisms beyond the initial anonymisation of transcripts.

While Braun and Clarke (2006) advocate for an illustrative approach to presenting data extracts which involves presenting these as longer narratives with surrounding text describing the content of quotes in detail (p. 93), the researcher decided to opt for a more analytical approach to presenting data. This was deemed appropriate given the sensitive context of the research and important ethical considerations relating to the preservation of participants' anonymity. As such, data extracts

presented in the thesis are often presented as shorter 'snippets' as opposed to 'the whole story' and description of participants and their specific situations is limited in detail. This approach to presenting data is acknowledged as detracting somewhat from the narrative 'flow' of the findings chapter, as some insightful and compelling narratives of prisoners' experiences of information had to be effectively 'chopped up' into smaller quotes relating to specific categories of information need, type of information source, or issues influencing information behaviour to ensure participants' were not identifiable. However, reflecting upon the fact that small details may be telling in this small world context, this approach was considered appropriate, and the data extracts presented in this thesis are felt to offer a detailed, compelling, and stimulating account of the data from interview discussions.

3.10 Ethical considerations

Given the nature of this research, ethical considerations were extremely important in securing permission from both the University of Strathclyde University Ethics Committee (UEC) and Scottish Prison Service Research Access and Ethics Committee (SPS RAEC) to conduct the research in a maximum-security prison facility. Key ethical considerations are discussed below.

3.10.1 Stakeholder approval

In addition to proving that all ethical considerations were made, an enhanced disclosure and PVG scheme membership were required as part of the research access agreement to ensure the researcher held no criminal convictions and was not barred from work with vulnerable persons. Ethical approval was obtained from the Strathclyde UEC with all interviews run in strict accordance with guidelines set out by the Code of Practice on Investigations Involving Human Beings 8th Edition (see University of Strathclyde, 2021). The researcher also adhered to guidelines set forth by the SPS RAEC.

3.10.2 Privacy of participant data

All information recorded in the study was treated in accordance with UK General Data Protection Regulations (see ICO, 2021). No information that could identify a participant or any other persons discussed in interviews was made publicly available. Names of participants were stored separately from research data (i.e. transcripts and demographic details); instead unique identifiers were assigned to these documents. Neale and Bishop (2012) point out that repeat interviews raise privacy concerns given the consideration volume of data collected on one individual and in consideration of this, care was taken in writing up the research to ensure any details potentially identifying participants were edited or removed. Where participant quotes are used in the final research report as a representation of prisoners' experiences, these are anonymised to protect participants' identities. To support data

analysis, the researcher's supervisor also had access to anonymised transcripts which referred only to participants' assigned identifiers; only the researcher knew the identity of participants.

3.10.3 Confidentiality

All conversations between the researcher and participants remained confidential other than for the purposes of the research. However, before interviews proceeded, participants were made aware of the researcher's legal and ethical obligation to breach confidentiality should information disclosed in interviews suggest any of the following: potential or actual threat to the prisoner's safety or that of others; potential or actual threat to the security of the prison; criminal disclosures revealing the prisoner's involvement in offences for which they have not been convicted; or any intent to commit further offences. As such, the researcher acknowledged that they could only offer a limited degree of confidentiality and ensured that participants were aware of this prior to taking part in the research (via oral discussion and information sheets). The researcher was aware of SPS institutional reporting procedures should a situation occur whereby confidentiality would need to be breached; fortunately, no such situations arose during fieldwork.

3.10.4 Data security and management

All demographic and interview data was stored securely and separately from consent forms, with anonymised identifiers assigned in place of participant names. Data was stored on a secure drive on the University of Strathclyde computer network and backed-up on a secure storage device prior to the COVID-19 lockdown. Following the introduction of lockdown restrictions in 2020, all data was moved to a secure drive on the researcher's personal computer while working from home. Written notes were typed up and paper copies disposed of at the earliest possible convenience to minimise the risk of data loss. Full transcripts and audio recordings of interviews and participants' personal (demographic) data were stored for a period of no longer than 36 months to allow for data analysis and submission of PhD thesis; after this period, data was permanently deleted from both the secure storage device, secure university drive, and researcher's personal computer, with all related paperwork disposed of securely through shredding. Following this period, only anonymised transcripts were retained for use in subsequent publications.

3.10.5 Working with vulnerable persons

Farrimond (2013) explains that institutionalised individuals such as prisoners can be considered a 'vulnerable group' due to exhibiting two features typical to this group; one, they "stand in a differential power relation with the researcher than others in the general population" and two, they are "often only accessed through 'gatekeepers'" (pp. 159-160). As such, as previously discussed, in addition to

proving that all ethical considerations were made, an enhanced disclosure and PVG scheme membership was required as part of the research access agreement to ensure the researcher held no criminal convictions and was not barred from work with vulnerable persons. Although questioning was not directed at such, it was recognised that participants might choose to discuss sensitive topics, including inherently sensitive topics such as mental health but also contextually sensitive topics (e.g. strategies for coping with imprisonment) during interviews. Therefore, particular attention was paid to participants' emotional status during interviews; where participants showed any signs of emotional distress or exhibited inappropriate behaviour, interviews were sensitively ended with relevant members of SPS support staff contacted for assistance where required. Participants themselves were made aware at the outset that they did not need to answer a question if they did not wish to and could withdraw at any point during the interview. Coupled with the other ethical considerations described in this section, this helped to ensure that participants were given an equitable role within the research and helped to maintain a fair power dynamic between participant and researcher.

3.10.6 Researcher bias

The researcher was previously employed as a librarian in three Scottish prisons, including the learning centre at HMP Shotts (the data collection site for this study), and had previously conducted a similar study at this prison in 2016 (see Canning and Buchanan, 2019). As such, it was acknowledged that the researcher might possess a subjective view of this prison based on their personal experiences. Acknowledging the issue of potential bias, the researcher took steps to ensure that any preconceptions regarding results were strictly segregated from the study (prior to deductive reflection upon emerging codes and themes). To minimise the researcher's preconceptions from influencing the interview discussions, the researcher adopted a semi-structured approach, posing open expansive questions which limit opportunities for the researcher to make assumptions about participants' experiences and avoid leading participants towards particular answers (Smith *et al.,* 2009). Where situations challenged the researcher (e.g. noting inconsistencies in participants' recollections of past events during which the researcher was present), the researcher did not intervene or correct participants, and this impartiality was maintained throughout the study where participants made any potentially disputable comments, as the focus of the research was on recording participants' experiences and personal views as opposed to obtaining factual testimony. The researcher's supervision by an academic supervisor with no experience of the prison was recognised as valuable in helping to minimise issues of bias as data was reviewed by both parties during analysis.

3.11 Risk analysis and mitigation

In any study, it is essential to conduct a thorough risk analysis prior to fieldwork to prevent unforeseen events from negatively impacting upon the research (Bryman, 2016). By planning in consideration of identified risks, the researcher was able to minimise the potential likelihood and/or impact of such events. The three main risks to the success of the study and mitigation steps are discussed below.

3.11.1 Drop-out of interview participants

It was acknowledged that with two interviews proposed for each participant, there was a risk that participants might only be able to take part in one interview due to prison transfer or withdrawal of voluntary participation. It was noted that participant drop out could impact on the quantity and qualitative depth of data collected from interviews (e.g. a participant reflecting on their information needs following an interview might develop further insight into their needs, but if unable to attend a subsequent interview, would be unable to share this further insight). To mitigate against this risk, the researcher consciously overrecruited above the desired minimum number of participants and excluded any prisoners shortly scheduled for transfer or release from the sample.

3.11.2 Physical harm to the researcher

As interviews were conducted at a maximum-security prison, it was noted that participants might be imprisoned for crimes of physical violence. While the researcher had no reservations conducting interviews with prisoners given their prior employment and research experience in the prison, the risk of physical harm to the researcher was acknowledged. To mitigate against this risk, a prison officer always remained nearby during interviews and the researcher was seated closer to the door than the participant should any situations arise in which escape from the room was necessary. Despite potential safety concerns, it was deemed important that prison officers should not be present in the room during interviews due to the potential for their presence to influence discussions; e.g. leaving participants unwilling to discuss this staff group openly during interviews and/or reluctant to discuss sensitive topics due to confidentiality and trust concerns. The researcher's experience of working in three prisons and completion of mandatory health and safety training required of prison staff (e.g. Personal Protection Training, Professional Boundaries, Suicide-Risk Awareness, and Fire Safety) was valuable in ensuring their wellbeing and safety throughout the duration of fieldwork.

3.11.3 Dependency on third party resources

Access to prisoner participants was acknowledged as being dependant on host institution resources; e.g. staff were required to conduct security checks and to escort the researcher to the interview location (prior to obtaining clearance to move around the prison independently) and learning centre

classrooms were required for interviews. It was anticipated that occasions might arise where these resources might not be available for certain reasons (e.g. shortage of staff or classrooms). To mitigate against this risk, regular contact was maintained with prison staff throughout the duration of fieldwork and the researcher remained flexible with regards to interviewing times and locations. It was also acknowledged that conducting participant recruitment and interviews in the prison learning centre would minimise the need for additional staffing resources or security checks as participants did not need to be escorted from other locations in the prison to attend interviews.

3.12 Fieldwork observations

Several observations were made during fieldwork, particularly in relation to how the research progressed in comparison to methodological plans and expectations. The most notable of these are discussed below.

3.12.1 Integration into research environment

The researcher was previously employed as the prison librarian and conducted a similar study at HMP Shotts and this was felt to have a positive influence on the research as previously established relationships with prisoners and prison staff aided recruitment of participants. The researcher's prior knowledge and experience, particularly their understanding of prisoners' colloquial language and social norms, was valuable in facilitating fieldwork and providing context to interview data. During fieldwork, staff and prisoners in the learning centre invited the researcher to take part in various activities (e.g. quizzes, performances, etc.) and when time permitted, the researcher made efforts to participate as part of their ongoing effort to become a friendly and familiar presence in the research environment. Staff and prisoners in the learning centre also occasionally requested assistance from the researcher with tasks such as supervising tests and helping students with referencing. The researcher was happy to assist with requests which did not take up too much of their time as doing so helped to further build trust and rapport with potential participants. However, to prevent too much of the researcher's time being taken up with such requests, they made it clear that they were not obligated to assist and did so on a voluntary basis.

3.12.2 Participant self-censoring

While many participants spoke naturally during interviews, swearing occasionally and frequently using colloquialisms, it was noted that some appeared to self-censor their language. For example, some participants tried not to swear; e.g. one participant stated, "I think they just don't give two flying… donkeys *laughs* I'm trying not to swear." Some participants apologised when they did swear; e.g.

one participant stated, “people’s mental health has went to fuck, man. Sorry for swearing,” and another, “and get the fuck out of this jail… Sorry about the language.” It was also noted that some participants tried to avoid using common prison colloquialisms; e.g. one participant stated, “I go to the - I was gonna say ‘screws’ *laughs* - the officers and ask them.” Interestingly, Jewkes (2002) similarly noted in her researcher that, as a female interviewing male prisoners, the majority of participants “may have tempered their language and shown me a slight degree of what might be characterised as old-fashioned, ‘gentlemanly’ courtesy not usually found in their general life” (pp. 76-77). To encourage natural conversation and flow, the researcher made participants aware that swearing was acceptable and natural language was encouraged in interviews. Some participants who had initially self-censored early in interviews, without any prompting or reassurance that this was acceptable, appeared to use more natural language as interviews went on; a possible sign of the building of trust and rapport leading to more honest and relaxed communication. It was also noted that some participants apologised for what they felt was irrelevant discussion; e.g. one participant stated, “I’m sorry. I know I’ve talked a load of garbage, man.” To prevent any feelings of discomfort, participants were also told they did not need to apologise when conversations occasionally went off-topic and were assured that their time and willingness to share thoughts was appreciated. They were also informed that if conversations became overly irrelevant, the researcher would make them aware and redirect the conversation to relevant topics.

3.12.3 Recording body language

The researcher took notes on participants’ body language (e.g. eye-rolling, shrugging, headshaking, etc.) during interviews where possible and with tact as it was recognised that this could offer insight beyond simple narrative analysis and give further context to interview audio data. It was noted that participants often sat formally and gestured rarely at the outset of interviews but displayed more expressive body language as interviews progressed; suggesting that they became more relaxed as they entered natural conversation with the researcher. Recording body language proved useful when participants’ statements appeared to be in contradiction to their body language; for example, showing visible signs of distress when discussing a topic that they claimed did not cause them any stress (note: any sign of real distress would have resulted in interviews being terminated but fortunately, this was not necessary during any interviews). Body language was a valuable indicator in data analysis as records helped to determine the emotional state of prisoners when making certain statements. This importantly helped the researcher to understand the meaning/intent behind participants’ words despite their tone of voice which might lead to alternative interpretation during listening sessions.

3.12.4 Research diary

Browne (2013) explains that research diaries are "useful repositories for critical reflection on the research process as it is unfolding, cathartic tools to air grievances, and important resources to rationalise decision making processes" (p. 432). Maintaining a research diary throughout the duration of fieldwork was valuable in this research for several reasons. It allowed the researcher to keep track of issues which arose during fieldwork and how these affected progress (e.g. lack of rooms suitable to conduct interviews, transfer of participants to other prisons, violent incidents resulting in lockdown of the prison, etc.). The researcher was able to keep a record of the names of potential participants who expressed interest but who were not currently available for interviews, and to keep note of staff members who assisted with fieldwork (e.g. officers who escorted the researcher to secure areas of the prison, and teachers who offered up their classrooms for interview use). The researcher was also able to record key decisions made during fieldwork (e.g. choosing not to interview a participant who appeared sleep-deprived or stressed on their planned interview date). The research diary also enabled the researcher to keep notes on current participants and the planned interviewing schedule, making notes about interesting points to follow up from previous interviews or to explore topics not yet covered. Personal reflections on the researcher's performance in interviews (e.g. ability to guide discussions, to dig deeper into interesting points made by participants while monitoring emotional status during sensitive discussions, etc.) were also recorded in the research diary, allowing the researcher to reflect and improve upon their interviewing technique between fieldwork visits.

3.13 Fieldwork problems and adaptations

The researcher had to adapt to several issues (foreseen and unforeseen) that occurred during fieldwork to minimise any potential disruption to the research progress. The most notable of these are discussed below.

3.13.1 Problems obtaining security clearance for equipment

The use of recording equipment in interviews required local security clearance which proved to be more difficult to obtain than initially anticipated (based on the researcher's previous experience of conducting similar study at HMP Shotts in 2016). While clearance was pending, the researcher adapted by interviewing participants who requested that only written notes be taken during their interviews. Two weeks following the start of fieldwork, the researcher was able to secure permission to use an audio-recording device which belonged to the learning centre until clearance for the personal equipment was obtained. However, using local equipment complicated the data transfer and

storage process as the device could not leave the prison; audio files had to be transferred from the audio-recording device onto an Apple Mac PC, then transferred to an encrypted password-protected USB, then transferred to a Windows PC, before being copied onto a blank disc which could then be taken outside of the prison to the researcher's office where it would be transferred onto their secure university drive. This method of handling sensitive audio files was not ideal given that there were several points where data could be potentially lost or leaked (e.g. if files were not permanently deleted from learning centre computers or the physical CD was left unattended or lost). However, given the alternative option of postponing fieldwork entirely, this approach was considered worthwhile to ensure research progress and the researcher took great care to ensure data always remained secure. The data storage and transfer process were far simpler once approval for researcher's personal audio-recording device had been obtained; interviews were recorded on a dictaphone which remained on the researcher's person at all times and audio data was uploaded directly to the researcher's secure university drive immediately following their return to office later that day.

3.13.2 Factors limiting the number of interviews with each participant

A minimum of two interviews with each participant were planned to help build trust between the researcher and participants and to permit time for reflection between interviews. However, the actual number of interviews with each participant varied; some participants decided following initial interviews that they did not wish to participate in a second interview while some did not attend the learning centre on the days they were scheduled for second interviews due to sickness, last-minute visits from family, and/or transfers to other prisons. Prison lockdowns (which can be unpredictable and restrict movement between areas of the prison) also prevented access to participants on several occasions, but participants were fortunately often already in the learning centre when lockdowns occurred and could still be interviewed. The researcher maintained a flexible interview schedule to ensure time was not wasted when participants scheduled for interviews were not available, interviewing other available participants or working on research-related tasks (e.g. communicating with staff, recruiting potential participants, etc.) during free time. Some participants approached the researcher following second interviews to explain that they felt they had more to say or wished to add more detail to previous points of discussion. With permission from learning centre staff and careful consideration to any disruption to participants' education, a handful of participants took part in a third interview which permitted further in-depth exploration of sensitive information needs and the social and affective barriers to prisoners' information seeking.

3.13.3 Interruption to interviews

On several occasions, interviews were interrupted by staff or prisoners passing on information about the regime (e.g. letting the researcher know a movement was scheduled shortly or an incident had occurred which could potentially result in lockdown of the prison). Occasionally, interviews were interrupted by staff members visiting the learning centre who did not realise interviews were taking place, despite the researcher displaying notices on interview room doors stating "Interview in progression. Do not disturb." When interviews were interrupted for any reason, audio-recording was paused, and the interview did not proceed until the third party had left the room and the door had been closed over. Fortunately, interruptions did not appear to overly disrupt interviews, with conversations normally picking up where they had left off once the third party had left the room. However, there were occasions where discussions around sensitive topics were interrupted and difficult to revisit after interviews resumed; when this occurred, the researcher attempted to sensitively revisit the topic in subsequent interviews where possible.

3.14 Chapter summary

In summary, this chapter described the methodological approach of the current research aimed at exploring the information needs and seeking behaviours of prisoners and potential ways to support the meeting of their information needs. The researcher's previous MSc research on the same topic is acknowledged as a useful pilot study for the current research, and areas where the research design of the previous work has informed the design of this doctoral research are specified. The research paradigm of the current study is described as taking a 'constructivist' ontological approach and 'interpretivist' epistemological approach, utilising a phenomenological perspective in the analysis of data, and the theoretical framework (which constitutes the deductive elements of the research) is outlined (i.e. Chatman, 1996, 1999; Taylor, 1968; Wilson, 1997). The research design, consisting of semi-structured one-to-one repeat (2-3) interviews with 24 adult male prisoners at one prison in Scotland, is outlined and justified, and the approach to data analysis following Braun and Clarke's (2006) six stages approach is described, step by step, as an ongoing process throughout the duration of the fieldwork. Ethical considerations, important given the sensitive prison context of the research, are described in detail, followed by identified risks to the research (i.e. potential drop-out of interview participants, risk of physical harm to the researcher, and dependency on third party resources) and associated mitigation plans. Several observations made during fieldwork relating to the researcher's integration into the research environment, participants' tendency to self-censor during interviews, and the value of recording participants' body language and maintaining a research diary are then

described. Finally, the impact of several issues which arose during fieldwork are discussed, including difficulties obtaining security clearance for equipment, factors limiting the number of interviews with participant, and interruptions to interviews.

Chapter 4: Findings

4.1 Introduction

This chapter presents findings from interviews with twenty-four prisoner participants exploring the information needs of prisoners, sources of information available to prisoners and why these are used (or not), and any issues influencing the meeting of prisoner's information needs. The chapter begins by presenting an overview of participant demographics to outline the sample of the study (*section 4.2*). Following this, qualitative data from participant interviews is presented which evidences a range of prisoners' information needs (*section 4.3*), sources of information used by prisoners and factors influencing engagement with these (*section 4.4*), and issues which influence the meeting of prisoners' information needs (*section 4.5*). Interview data has been anonymised with certain details redacted in quotes to protect participants' identities. Where participants did not consent to audio-recording, evidence is provided via description of the interview content in lieu of quotes.

4.2 Participant demographics

This section describes the demographic background of the participants of this study using descriptive statistics and figures, including basic details of the sample (i.e. age, gender, sexual orientation, and ethnicity), information about participants' prison sentences (i.e. length of sentence, time remaining on sentence, nature of crime, and details regarding any previous sentences served), and social and economic background (i.e. education, employment, accommodation, relationships, and parental status). These descriptive statistics provide a detailed overview of the sample of this study, enabling comparison of the sample group to those of existing related work and helping to highlight any limitations to the generalisability of this study's findings to other prisoner demographic groups.

4.2.1 Basic demographic details

In total, twenty-four adult male prisoner participants were interviewed, aged from mid-twenties to mid-fifties, with an average age of 34.3 (exact age range is unspecified to protect participants' identities). Twenty-two (92%) identified as White, one (4%) Black, and one (4%) Mixed Race. Twenty-three (96%) stated they were heterosexual, while one (4%) stated that he was gay.

4.2.2 Prison sentence

All twenty-four participants (100%) were serving long-term sentences of 4 or more years; thirteen (54%) were serving life sentences of approximately 18 years. Participants' sentences totalled approximately 356 years, with the mean average sentence being 15 years.

As illustrated in Figure 3 below, two participants (8%) had less than 1 year remaining on their sentence, seven (29%) between 1 and 5 years, three (13%) between 5 and 10 years, eleven (46%) over 10 years, and one (4%) serving an Order for Lifelong Restriction did not know how long he had left to serve.

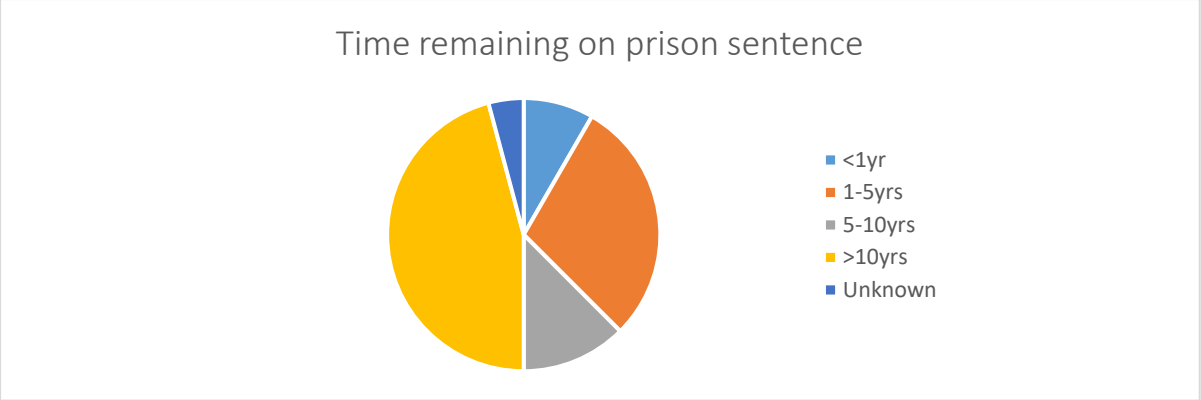

Figure 3 Time remaining on participants' prison sentences

As illustrated in Figure 4 below, fourteen participants (58%) stated that the nature of their crime was homicide, four (17%) drug-related, two (8%) serious assault, two (8%) attempted murder, one (4%) fraud, one (4%) fire-raising, two (8%) theft, one (4%) handling offensive weapons, one (4%) dangerous and careless driving, and one (4%) participant did not wish to disclose this information. (Note: Four participants were serving sentences for multiple charges, ranging from 1 to 3 offences).

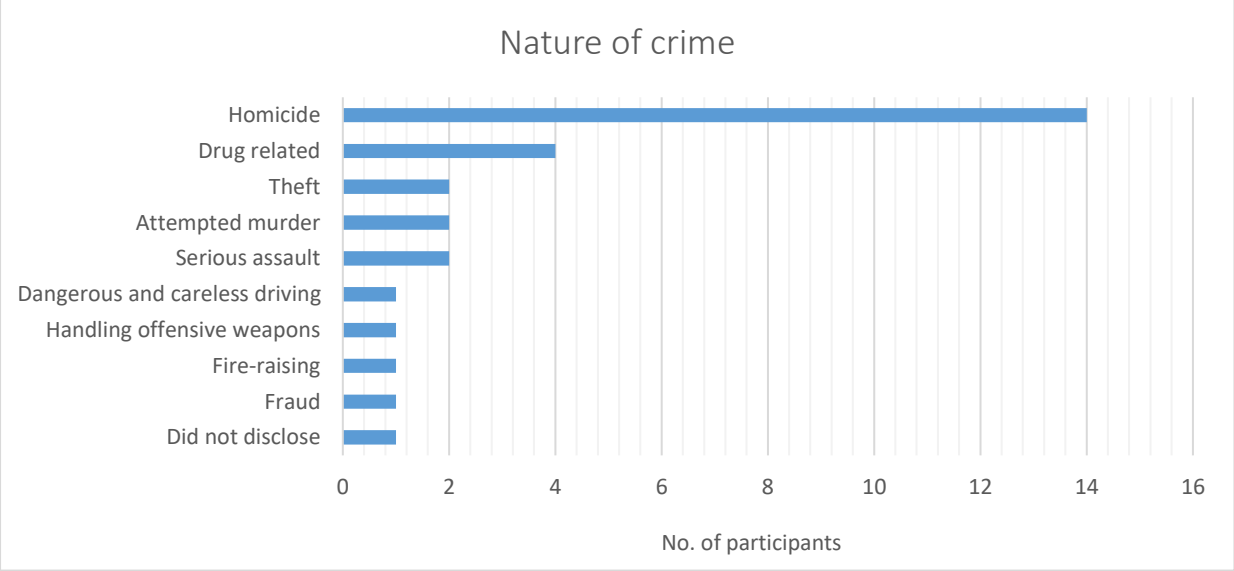

Figure 4 Nature of participants' crimes

Eleven participants (46%) stated that this was their first prison sentence, while thirteen (54%) had previously served time in prison. Of those with previous sentences, the total number of sentences served ranged from 1 to "over twenty" and the total time spent in custody ranged from several months to over 40 years (exact time spent in custody is unspecified to protect participants' identities).

4.2.3 Education

As illustrated in Figure 5 below, seven participants (29%) stated that they had no qualifications prior to imprisonment, eight (33%) had Standard Grades, four (17%) Highers, two (8%) an HNC, two (8%) an HND, and one (4%) an undergraduate Degree (foreign degrees are presented as UK equivalents to preserve anonymity).

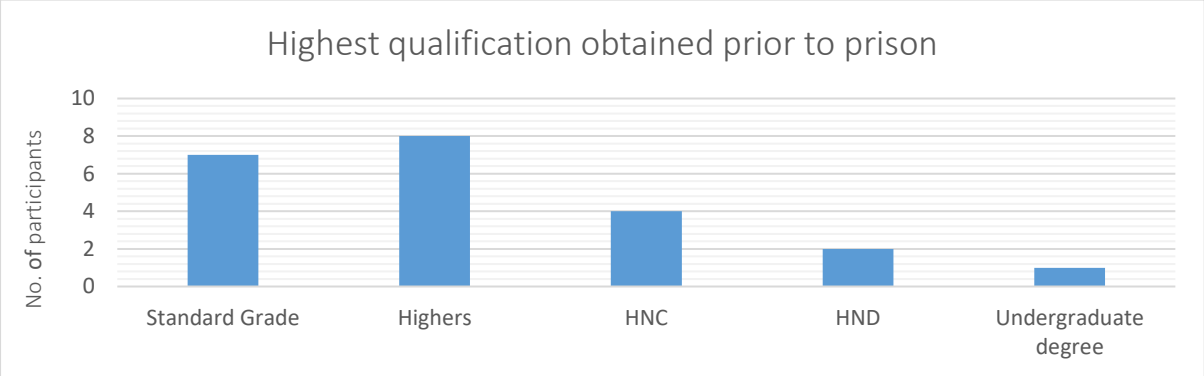

Figure 5 Participants' highest qualification obtained prior to prison

Thirteen participants (54%) stated that they had completed qualifications during their sentence, while eleven (46%) had not. Four (17%) were studying Open University degrees at the time of the study.

4.2.4 Employment

As illustrated in Figure 6 below, seven participants (29%) stated that they were unemployed prior to imprisonment, eleven (46%) were in full-time employment, one (4%) in part-time employment, four (17%) were self-employed, and one (4%) was in full-time education.

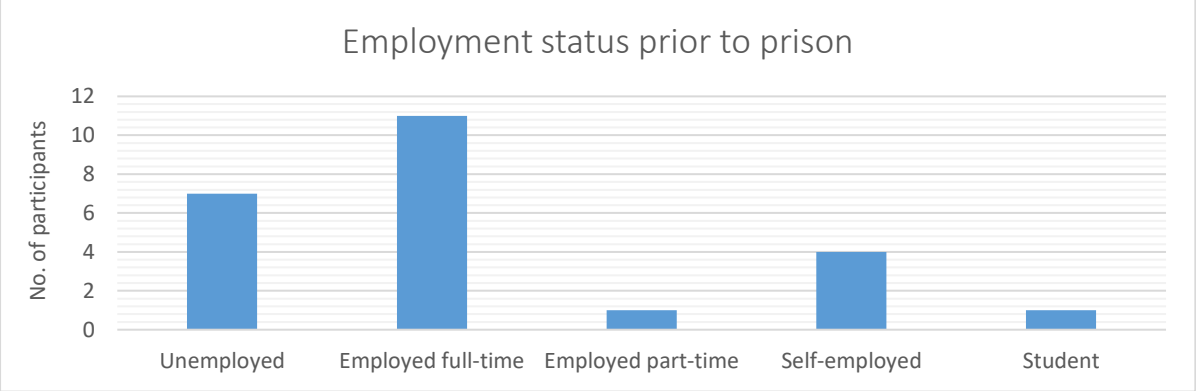

Figure 6 Participants' employment status prior to prison

4.2.5 Accommodation

As illustrated in Figure 7 below, six participants (25%) stated that they were living with parents prior to imprisonment, six (25%) were in private rented accommodation, five (21%) were owner-occupiers, two (8%) council tenants, one (4%) was homeless, one (4%) was in temporary accommodation, one (4%) was living with his girlfriend, and one (4%) was living with other relatives.

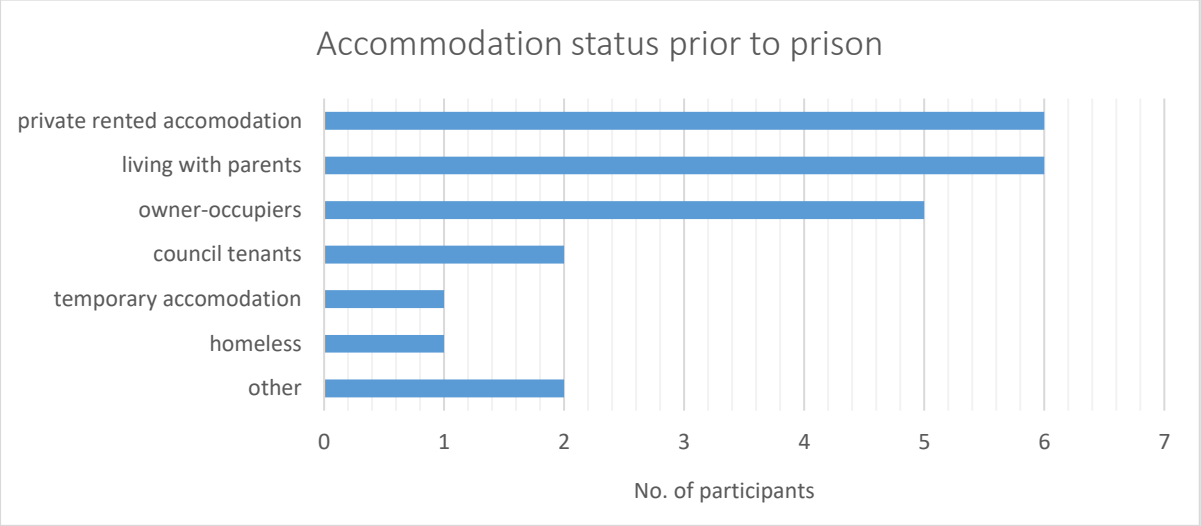

Figure 7 Participants' accommodation status prior to prison

4.2.6 Romantic relationships

As illustrated in Figure 8 below, seven participants (29%) stated that they were single prior to imprisonment, thirteen (54%) were dating, three (13%) married, and one (4%) married but separated.

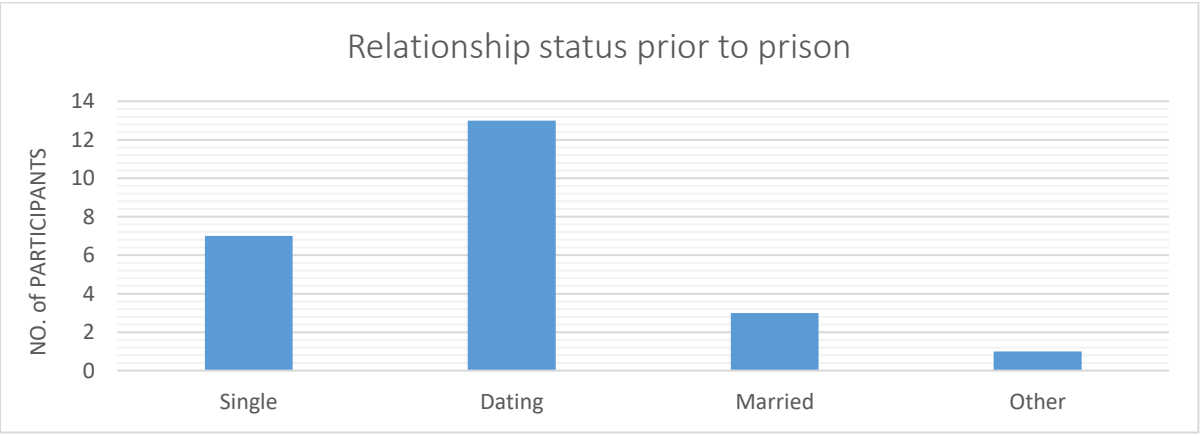

Figure 8 Participants' relationship status prior to prison

Fifteen participants (63%) stated that their relationship status had changed since beginning their sentence: all seven participants who were single before coming into prison were still single; eleven (85%) out of the thirteen who were previously dating were now single; and all three who were previously married were now divorced/separated/single.

4.2.7 Parental status and contact with children

As illustrated in Figure 9 below, eleven participants (46%) stated that they had children, while thirteen (54%) did not. Of those who had children, nine (82%) were in contact (although level of contact varied) and two (18%) were not. Participants who had children stated that they had between one and three children each, with reported ages ranging from pre-school (under 5) to mid-thirties (exact ages of children unspecified to protect participants' identities).

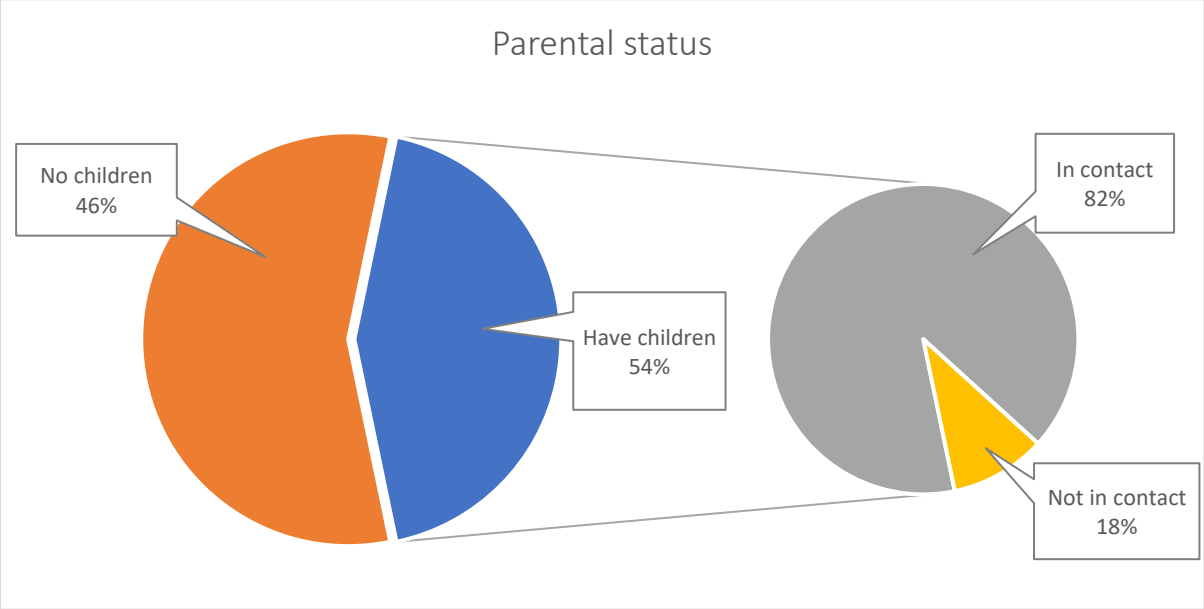

Figure 9 Participants' parental status and contact with children

4.3 Information needs

This section presents findings which evidence the information needs of prisoners. Table 1, on the following page, illustrates the information needs discussed during interviews, grouped and categorised by the researcher, and listed in decreasing order of the number of participants who discussed each need. Categories do not necessarily represent a comprehensive list of the needs experienced by prisoners but reflect those discussed by participants of this study. Frequencies (rounded to the nearest whole number) do not necessarily indicate importance of needs but reflect what participants chose to discuss and/or recalled during interviews. Findings which evidence information needs are presented in this section in the order they appear in the table.

Table 1 Information needs discussed by participants

Category	Examples	Number of participants	Percentage of participants
Mental health	mental illness, emotions, suicidal ideation	19	79%
Relationships	children, romantic partners, prisoners	18	75%
Prison regime	booking visits, timetables, ordering items	15	63%
Education	qualifications, coursework	12	50%
Rehabilitation	assigned courses, moving on dates	11	46%
Reintegration	housing, employment, resettlement	8	33%
Physical health	pain diagnosis, injury, physical fitness	8	33%
Legal	appeals, repatriation, court citations	5	21%
Recreational interests	movies, sport, music	3	13%

4.3.1 Mental health

Nineteen participants (79%) discussed information needs relating to their mental health, on topics such as dealing with general symptoms of poor mental health, mental illness, suicidal thoughts, and negative emotional states. For example, one participant stated, "I've looked for information into my mental health [...] it's very important." Another alluded to a need for information on coping with depression; "I've been, well, so they say, I'm depressed. […] It is overwhelming, really overwhelming." Another participant described the importance of maintaining good mental health:

> You need to keep your mind fucking healthy, definitely. It's alright being the fittest person in the jail, but if you're the fittest person in the jail and you're getting out with mental health issues then you're going to end up coming back.

Some participants described their strategies for preventing and/or coping with mental health issues. For example, one participant explained that he preferred to focus on the present to minimise stress:

> I've got some friends up there and I just see them worrying and overthinking and getting anxious about things and I try to concentrate on the here and now, try not to think about the past. [...] No point in worrying about the future.

Another explained that he had abused drugs as a way of coping with unaddressed anger issues but recognised that it was only a short-term solution:

> I had a heavy rage in me, and I was at snapping point, so I started taking drugs and it kind of helped to be honest. It just kind of switches off your emotions […] but obviously it's only for so long and then it pulls you down.

Participants' discussions often suggested that it is common for prisoners to hide mental health issues as opposed to seeking information to resolve them, with several participants commenting on the "culture of wearing masks" which was felt to exist within the prisoner community. For example, one participant stated that prisoners would often "put on a brave mask", while another explained, "You can wake up, leave your cell, leave your gaff, with a mask on acting all happy and the minute you're locked up, it's like the whole world comes crashing down on you." One participant explained that he felt prisoners were well-rehearsed in hiding their "suffering" from others:

> Whether they're coming in to do a job, they're coming in to provide a service or whatever, all they really see is what we want them to see. […] If we're suffering, we're no gonna mention it. They will never see it. So, it's just because we've, we will have practised it and practised it and practised it, no just around the hall, but with our families, with our friends; hiding it from staff is not gonna be an issue.

Offering insight into the potentially severe impact of unmet mental health issues, interview discussions suggest that unmet mental health needs may be a factor contributing to prisoner suicides. For example, one participant stated that he suspected a prisoner had committed suicide recently "because his mental health issues were going unaddressed." Similarly, another stated that prisoners with mental health issues could be "too scared to speak about it [their mental health issues] […] they're just killing themselves, thinking that's the easiest option". One participant stated that he knew of a prisoner who had committed suicide without giving any prior indication, explaining that "he was keeping it [his mental health issues] a secret […] that's an example of a boy killing himself because he's got problems." One participant summed up mental health as "a very, very difficult subject" for prisoners and explained what he felt were the reasons for this and potential repercussions:

> They're [referring to prisoners with mental health issues] needing somebody to talk to and they just don't know how to approach it and they don't know who to go to […] they think the better way to do it is just by powering on and getting on with it, no realising how much damage it's actually causing inside […] They will keep it to themselves until it comes to a point where it breaks through, and it's going to, it's going to. There's only one place for it, it's like a volcano, it's like shaking a soda bottle.

4.3.2 Relationships

Eighteen participants (75%) discussed information needs relating to relationships, on topics such as maintaining relationships with family and romantic partners and establishing friendships with other prisoners. For example, evidencing information needs relating to family, one participant stated, "I mean I do try and keep up to date […] like if a family member's been ill or there's been an event or something". Another explained that he had sought information on a birth in the family from relatives; "When my sister had her wee daughter last year, obviously I was asking like what was happening; 'Has she had the kid yet?', this and that." While discussing such needs, several participants also discussed the difficulties of maintaining family relationships while serving a long-term prison sentence. For example, one participant stated, "It's hard to keep the relationship with them", and another, "It's impossible to keep a relationship together. [...] It's very, very hard to maintain it […] you're a distant parent, you're a distant son." Highlighting a potential link between prisoners' mental health and their relationships with family, one participant explained how his mental health suffered as a result of unmet information needs relating to the wellbeing of his family:

> I was stressed out; always wondering where they were, how was the wanes and stuff like that […] I really don't know how to deal with some of that stuff […] that's where all my depression, my stress comes from.

Similarly, another participant stated, "The fact is that depression could be born from years of being inside and missing vital moments of their family's lives, and it does, it hurts big time." One participant stated that the stress of this separation led to family being a "dodgy subject" amongst prisoners, explaining, "Anybody up the hall would go off their nut if you talk about family. […] It's because you cannae get to see them that much […] they're [referring to prisoners] trying to put that out their mind so they're no worrying about it."

Evident in some participants' discussions was a need for information on how to communicate with their children at the end of visits. For example, one participant who received regular visits from his children explained, "It can be hard sometimes watching them go away and they're greetin' [crying] and all that and they don't understand how you cannae go with them." Similarly, another stated:

> I've seen it with a lot of guys, you know, guys coming out the visit room and they're greetin' [crying] and all that, their kids are asking them, "How long are you gonna be in here?" and it's every time they come to see you because kids don't understand that, you know, years are forever to them.

Another participant explained that his only contact with his children was through phone calls because of these difficulties saying goodbye at visits:

> It's easier to say, "Goodbye" on the phone than it is at a visit because it's physical at a visit [...] you're cuddling them, you're kissing them, you're telling them how much you love them. […] I've seen prisoners break down in visit rooms because their wanes are leaving.

Similarly, another participant stated that he didn't accept visits from his children because of how this could affect them emotionally, explaining, "I don't want to put my child through a situation where when it's time to leave they get upset – 'Daddy, I don't want to go', 'Daddy, I want to stay with you'."

Also evident in interview discussions were information needs relating to romantic relationships. For example, one participant explained that, shortly after coming into prison, he found out that his girlfriend at the time was cheating on him, but he was unable to find out the identity of the other involved party despite trying initially to seek this information from his family and friends:

> To this day, I still don't know who it was with. [...] it was important to find out who it was because that's obviously what ended the relationship I was in [...] I wanted to find out and then after six months, I was asking people and nobody was telling me, so I was like that, well… I just gave up.

Another participant explained that divorce could be an "embarrassing" topic that prisoners would be reluctant to discuss with other prisoners, explaining:

> I can see it in guys where they're just no dealing with it well and you're just dying to go, "What's wrong with you? Want to nip in for a wee chat?" but you're no wanting to take that step either so… and you know they're just dying to speak to somebody. […] there's things like that; taboos, where they just won't speak about it.

Some participants also discussed information needs connected to establishing relationships with other prisoners. For example, one participant stated that prisoners would get to know each other through "small chat", asking questions such as "How long you doing, mate? What happened?". Similarly, another explained that asking other prisoners about the crime they had been imprisoned for helped to "break the ice" when first meeting them. However, the same participant reflected that it could be difficult for some prisoners to talk about their crime, explaining, "Some people don't like talking about their offence because some people, it's hard for some people to talk about sometimes… because I'm in for murder and it's heavy on you, so it is." However, one participant pointed out that prisoners could be viewed with suspicion for not being forthcoming when asked about their crime:

> "Oh, so why are you here? What did you do?" [...] In here it's that information that if people ask, then you say […] by holding back, you create a suspicion […] because that's

> information that prisoners, if they ask, expect to come freely; they expect the answer because they could find out if they wanted.

4.3.3 Prison regime

Fifteen participants (63%) discussed information needs relating to the prison regime, on topics such as ordering personal items, checking their PPC (prisoners' personal cash) balance, and timetabled activities. For example, one participant described seeking information on ordering replacement controllers for a games console:

> I wanted to find out information on how to order two new PlayStation controllers. After, one of the officers I spoke to had to make a few phone calls […] he just basically explained that I have to fill in a sort of order form and just hand it in. […] it was as easy as that.

Another participant described regularly seeking information on the balance of his PPC; "The other thing that I regularly try to access is, for example, how much money is in my account." Another explained that he would ask prison officers to phone the learning centre on weekday mornings "to find out if education is on [...] because it affects your whole day", while another stated that he regularly sought information on the gym timetable "because in here, the gym is at a different time every day depending on the schedule."

While participants discussed a range of everyday needs relating to the prison regime (such as those above), needs relating to the rules and routines of the prison appeared to be most frequently experienced at start of a prison sentence. For example, one participant who had only recently started his sentence, explained, "Some of the information I've tried to access, for example, is about items you're allowed here […] what you can bring in, how you can apply for it, things like that." Another participant, reflecting on the start of his sentence, explained, "I think the biggest things when you come in […] how to get clothes in, how to get toiletries, everything, see all that? That's like your main questions." Another explained further examples of information prisoners sought at the start of their sentence; "How to get visits and that. How to book them. [...] That's just something else you need to find out about when you come in." One participant explained that these needs also frequently occurred following transfers to other prisons given the different regimes of each prison; "That still happens when you go to another prison because prisons change all the time; 'How do I do this? What time do I get my visits? How do I get my clothes in? Am I allowed to do this?'"

Several participants expressed a dissatisfaction with the level of information on the prison regime provided by the prison service at the start of their sentence. For example, one participant stated, "When you first come into prison, you've got to find out things yourself. […] Nobody really takes you

aside and says, 'Well this is what happens'". One participant described the impact on his mental health of receiving insufficient information when he entered prison for the first time:

> I was asked, "Can you take off your clothes?" and I was like, "Okay, well can I close the door?" It was a strip search, but I didn't know that! […] It would be nice to be told what's happening or at least to understand the situation […] you've just been brought in; you don't know what the situation is; that's a traumatising experience.

Another participant explained that he felt there was a lack of basic information provided to prisoners regarding the prison regime in general which could lead to emotional issues and even violence:

> Information-wise, there's definitely a huge deficit […] A third to half of the problems on the landing, on the floor [referring to prisoners' living quarters], are literally information-related, so people start fighting and people start being pissed off, being really pissed off, really angry, fighting, and kicking doors and stuff, because it doesn't, things don't get communicated properly, simple problems which I know, for example are simple issues, for them, it's overwhelming; they think, "Oh, I'm not getting that and that and that. I don't know how to get that and so-and-so got it".

4.3.4 Education

Twelve participants (50%) discussed information needs relating to their education, including information required to complete coursework and to gain qualifications in the prison learning centre. For example, one participant explained, "Well I had to do a talk in the communications class once and [teacher's name] managed to get something printed off for me, like a Wikipedia page about a couple of artists." Another participant explained that he had sought information on a specific topic so that he could complete coursework required to obtain a qualification:

> I had to do a… What's it called again? A slideshow thing [...] I got [teacher's name] to get the information; she went on the computer and got it for us. [...] without that I wouldn't have been doing, I wouldn't have got my qualification.

Participants also discussed seeking information required to complete assignments as part of their Open University (OU) degrees. For example, one participant who was studying an OU course stated, "The information I need like in here? Just stuff for my OU, sometimes I get stuck with the OU." Similarly, another participant explained, "There are times when I have to go to a member of staff in the learning centre to get information from the university website", and added, "In the grand scheme of things, it's not as important as, say, seeing my loved ones, but if I want to continue studying with

the university and finish my degree, then it's extremely important." Similarly discussing the importance of obtaining information to complete his degree, another participant explained:

> I need to ask for information quite a lot in respect of my Open University studies [...] often I have to ask one of the members of staff here in the learning centre. [...] I guess a lot of it's quite important, but it might seem trivial sometimes.

While discussing information needs relating to education, several participants also described their reasons for attending education classes in the prison learning centre. For example, discussing OU courses, one participant explained, "It fills time. We're getting something out of it at the end of the day but in here, its part-time study and it's six years; six years out of a life sentence. It helps." Similarly, another participant stated his reasons for doing his OU course:

> It's giving me something else to focus on now […] it's gonna take six year to get the degree [...] that gets me on to the home straight and then obviously it's teed us up for, hopefully it'll open some doors for us when I'm outside.

Also discussing improved job prospects following release from prison, another participant explained, "I can get qualifications which is gonna make it easier for me to try and get a job when I get out." One participant, who had come into prison with no qualifications and who was now studying an OU course, described education as "the way forward in prisons" and explained that working towards a degree had helped him to remain "focused" throughout the duration of his prison sentence.

4.3.5 Rehabilitation

Eleven participants (46%) discussed information needs relating to their rehabilitation, on topics such as generic assessments (which assess whether they would benefit from completing offending behaviour programmes), rehabilitation courses, and 'moving on' dates (referring to their progression towards a lower-security prison and/or release from prison). For example, one participant stated, "Moving on; I've asked about that, and about getting my g… my generic assessment thing", and another, "I've been trying to get information for like courses that I need to do to leave prison." One participant described the questions he had asked about his assigned rehabilitation course; "I need to do the violence course, so I had to ask my PO [personal officer], 'What's happening with my violence course? Am I on it? Where am I on the list? Am I getting on the course?'"

Several participants felt that information on topics relating to their rehabilitation was difficult to obtain. For example, one participant described access to progression-related information as "very closed", another stated that he felt he was "getting nowhere" when trying to find out his position on the rehabilitation course waiting list, and another explained that it was "proving difficult" to find out

which rehabilitation course he would be assigned. The anxiety associated with these unmet needs was clear, with participants expressing concern about the potential risk of having to serve additional time in prison if unable to address these needs. For example, one participant explained, "I want to know, or I'll no get moved on; it means I could end up doing more time". Similarly, another stated, "I'm worried […] If I can't complete those courses, or any courses that are mandatory for me to progress, then I may end up spending more time in prison than I really have to."

While discussing information needs relating to rehabilitation, a couple of participants also discussed issues which they felt were associated with prisoners' rehabilitation. For example, one participant felt that the timing of rehabilitation courses near the beginning of prisoners' sentences was problematic:

> They're [referring to the Scottish Prison Service] saying, "What is the point in giving these guys skills if they are no gonna put them to use in the next ten to fifteen year?" But at the same time, if you want guys to be rehabilitated, get them at the start of their sentence, no at the fucking end of it. […] Why leave them to go and do other things and get involved in other things before the end?

Another participant explained that he felt frustrated that the prison service did not recognise his rehabilitative needs despite being aware of his criminal background:

> I kind of expected people to know my needs [...] and when they never then I let it turn to anger […] if somebody prior to a sentence is being described characteristically as living a certain way and if they're file shows that they're failing to live up to their responsibilities or whatever over a long period of time, should a person have to present those concerns if it's already been diagnosed or raised?

4.3.6 Reintegration

Eight participants (33%) discussed information needs relating to reintegration, on topics such as seeking employment and/or housing, managing money, and caring for relatives following their release from prison. For example, one participant explained that he had sought information on obtaining employment following his release from prison; "I've went to see my personal careers officer in prison, where I've made enquiries to see if there's any jobs going in any line of work." Another participant explained that he had questions about managing debt after his release; "I'll want to know what I'm doing with myself when I'm getting out. I've got like rent arrears and all that outside and I don't know, what am I gonna do?" Another participant stated that he wanted to take guardianship of his grandmother and save her house from repossession following his release his prison but explained that he felt this information could not be obtained while he still in prison:

> But when I get out, I'm gonna try to take guardianship of my granny [...] I've tried to look into it […] I don't know if there's enough time for me to get out and save the house, but I can only know that answer when I get out.

Participants' discussions suggest that feelings of stress are often associated with unmet information needs relating to reintegration. For example, one participant described his concerns about being released homeless and with no experience of managing money:

> This is the first time I'm ever gonna go out of prison homeless and I've no got a clue what to do. I don't even know how to budget money. […] It gets me stressed out, depressed; that just all builds up and builds up and that's why I've started talking to mental health [staff] because if I just keep letting that build up, I'll end up exploding.

Another participant, who was imprisoned for murder, had concerns about potentially seeing the family of his victim after release; "When I get out, I'm going to see the [victim's] family and all that [...] So that's going to be hard, eh? [...] What do you do in that situation?"

Some participants expressed concerns about changes to the outside world during their imprisonment and dealing with them upon their release. For example, one participant stated, "They speak about prison as if it's a place where time stays still: that's true to some extent. When you're released, you're years behind; friends have moved on and now have families, children." Another participant discussed issues around the technological advancements which occurred during his imprisonment:

> Spending so long in prison you can imagine I find myself at a disadvantage when I'm going back out, because time passes, things change. […] The problem now I'd imagine is when you go into job centres now, it's all computerised and registering is on website stuff, emails, etc.

4.3.7 Physical health

Eight participants (33%) discussed information needs relating to physical health, on topics such as physical injury, medication, and medical conditions. For example, one participant stated that he had suffered a sports injury previously in prison and had sought information from a doctor, but felt that he required further information as he was still experiencing problems:

> I was down the gym playing football and I fell on my knee on the indoor surface and damaged it […] I spoke to the doctor, and he said the best thing to do is rest it, but then I've still been getting problems so I'm going to have to go back down to find out more information.

Another participant explained that he had recently attempted to seek information on the medication that his nephew had been prescribed for his medical condition:

> They're trying to feed him a lot of tablets that my family don't really know about and its experimental drugs. So, I was asking them [nurses] for that today but they had no information at all on it. […] I just wanted to mostly understand how it's going to help and stuff like that.

Information needs relating to physical health appeared to stem not only from prisoners' need to obtain information pertaining to their own health but also that of others. For example, one participant described the anxiety he felt when unable to find out the reason for his mother's admission to hospital:

> My mum had a stroke last year and I needed information from my brothers to find out what was happening […] I was frustrated because they told me she was in hospital, right? But they didn't tell me why. I didn't find out until three days later [...] for three days I couldn't think straight; it was just constant.

While discussing information needs relating to physical health, several participants also described their reasons for using the prison gym. For example, one participant commented, "The gym, that's, you know, routine, it's mentally and physically good for you", and another, "It's a big thing for me in here. It helps me keep away from everything else [referring to drugs and violence] and obviously it's your routine, your structure and that". Similarly, another participant stated, "People say, "Time flies when you're having fun" […] gym, football, things like that do help."

4.3.8 Legal

Five participants (21%) discussed needs relating to legal information, on topics such as court citations, repatriation, and appeals. For example, one participant stated that he had recently sought legal advice from his solicitor about a court citation; "I got a citation in […] I'm supposed to go up as a witness for something, and I phoned him [my solicitor] about that because I was asking whether or not I actually had to go to that." Another participant, who was a foreign national prisoner, explained that he had contacted both his solicitor and the Scottish Prison Service to find out if he would be resentenced after repatriation to his home country but felt "stuck in limbo" one year on as he was no further on in clarifying the issue. Some participants also discussed information needs relating to appeals, often in relation to the start of a prison sentence. For example, one participant explained, "Adjusting to your sentence, first offenders [...] that's probably the moment where you need your family's support and you need the information for appeals, for transfers or whatever." Similarly, another explained:

> If you're freshly remanded you need to get evidence together, affidavits, witness statements, which not always the solicitors take care of, to defend your own life, your own position and freedom.

A couple of participants stated that they felt that prisoners' educational backgrounds could influence their ability to seek out and access legal information. For example, one participant explained:

> I've seen a few things here which I know if I would have had that problem, I would have made it go away, through the right avenues you can make it legally go away, but here, people they don't know how to go about it, they maybe don't have even the language skills.

Similarly, another participant stated:

> There's a lot of prisoners that can't read and write and that don't have the, well, they don't know that they should have the right to appeal, or they could have appealed. [...] It can be devastating for some people. It can mean being given a life sentence as opposed to being given, ehm… you know, a sentence for a culpable homicide which makes a complete difference to your life.

4.3.9 Recreational interests

Three participants (13%) discussed information needs relating to recreational interests. For example, one participant explained that he often sought information on football transfers:

> Just trying to find out about sport and stuff like that outside, with football and that, transfers; obviously it's the transfer window and I like to keep up to date [...] you can ask members of staff to look it up on the computer.

Another participant explained that he regularly sought information on his interest in a particular music genre by subscribing to a monthly music magazine; "I listen to a certain type of music out there and I buy a certain monthly mag just to keep up with it." One participant, who was interested in new movie releases, explained how the scarcity of sources which could provide information on this interest, made it difficult for him to keep up to date with his hobby:

> I like to know what movies are coming out and what's the speculation on them; what's the fanfare. Obviously online forums are good, and you're just totally cut off. All I've really got is [...] radio which is very scarce and the four-second trailer that hopefully ITV would have bought maybe a couple of weeks before it comes out, so it's so bad. [...] I've got, well obviously, a designated pal that does it all for me in one clean swoop. [...] But the fact that you need to set that up proves that there's something wrong somewhere.

4.3.10 Overview of information needs

In summary, findings of this study evidence a range of prisoners' information needs. Analysis of interview data identified a range of information needs, including those relating to themes such as mental health (e.g. sub-themes including mental illness, emotions, and suicidal ideation), relationships (e.g. maintaining bonds with family and establishing relationships with other prisoners), the prison regime (e.g. ordering personal items), education (e.g. researching topics to complete coursework), and rehabilitation (e.g. progression dates and mandatory courses). Also evident were information needs relating to prisoners' reintegration following release from prison (e.g. seeking employment and accommodation post-release), physical health (e.g. medicines and injuries), the law (e.g. preparing for appeals), and recreational interests (i.e. keeping up to date with sport and new movie/music releases).

4.4 Sources of information

This section presents findings which evidence information sources used by prisoners and factors influencing interactions with these. Table 2, on the following page, illustrates sources discussed during interviews, grouped and categorised by the researcher, and listed in decreasing order of the number of participants who discussed each source. As in the previous section on information needs, categories do not necessarily represent a comprehensive list of the sources available to and/or used by prisoners but reflect those discussed by participants of this study. Again, frequencies (rounded to the nearest whole number) do not necessarily indicate importance of and/or value attributed to information sources but simply reflect what participants chose to discuss and/or recalled during interviews. Findings which evidence sources are presented and discussed in the order they appear in the table.

Table 2 Information sources discussed by participants

Category	Number of participants	Percentage of participants
Other prisoners	21	88%
Prison officers	20	83%
Healthcare professionals	18	75%
Family	17	71%
Teachers	16	67%
Media (i.e. television, radio, newspapers, and magazines)	11	46%
Solicitors	5	21%
Learning centre resources (i.e. legal texts, encyclopaedia software, and library books)	5	21%
Friends (outside of the prison)	5	21%
Printed prison resources (i.e. posters and the prison induction booklet)	4	17%
Social workers	4	17%
Listeners (prisoners trained by the Samaritans)	4	17%
Prison chaplain	3	13%
Prison librarian	3	13%
Addiction support services	3	13%
Physical training instructors	3	13%

4.4.1 Other prisoners

Twenty-one participants (88%) discussed other prisoners as a source of information. For example, one participant explained that he had asked prisoners about education classes; "When I went to find out about education, it was other cons I asked to see what classes are like." Another participant stated that he had asked another prisoner about what to expect while taking part in rehabilitation courses:

> I went to [prisoner's name removed] last night […] I was like, "You ever done a course?" and he was like, "I done 'Care'" […] he showed me all the stuff that he had to do […] him just showing me that and him telling me what he told me kind of gave me all the answers I needed.

One participant described the various questions about the prison regime he had asked other prisoners when he first entered the prison:

> There was times I did go to cons and I was like, "Right, how do I do this?" and "Where do you go to get this?" and "How do you ask for a job?" and "What time's dinner? What time we get opened at? What time's rec?" and stuff like that.

Lived experience was a common reason given by participants for approaching other prisoners as opposed to staff for information relating to the prison regime and prison experience, particularly at the start of a prison sentence. For example, one participant stated:

> Well, when I first came in, there was a boy I knew from outside. […] I spoke to him and he helped me out […] he told me how it works, just how the jail works [...] I know staff are there obviously for things but he's the one that's actually doing that time, so he knows what's to come.

Similarly, another participant stated:

> The first thing I done when I come up here was go and see a guy that's doing thirty-odd year and he's done ten-fifteen year and I've asked him, "What's the ten to fifteen years been like since you've been sentenced?" [...] It was good to get advice because if I'm doing, I always think to myself, "If I'm doing a long time, I'm gonna need to find a way of coping with this long time".

Another participant explained, "You can use other people's experiences [...] you can use their knowledge to prepare yourself", and another, "I would rather go to a con because they're there, they're living it, they're experiencing it." Offering further insight, when asked why lived experience was important to prisoners when seeking information relating to the prisoner experience, one participant explained, "It's like you being in the jail, in a cell, you could imagine how it is but you wouldn't understand until you'd really done it."

Several participants also discussed prisoners who they considered friends as a source of information. For example, one participant stated, "I have my own network in here and if I need help or any information like that, I'll go to my friends." Similarly, another participant stated, "See if I had a problem, I could probably go and talk to my pals […] when you've been in a hall for years then it's like family." One participant explained why he felt able to confide in his friends about sensitive topics:

> See if it was something of the heart; somebody you used to go out with or something, right? [...] you don't think straight so it's always good to get a bit of outside counselling [...] that's the only place that I would go to in here, my close circle, because that wouldn't be giving information to anybody that they don't need to have.

However, one participant expressed a reluctance to discuss mental health issues that were considered a normal part of the prisoner experience with his friends due to a desire to not burden them:

> It's a lonely place [...] you just really need to keep all of your stuff to yourself. As I says to you, you cannae go in and bog down your pals [...] Go like that, "My heeds bursting!" this, that, and the next thing, because he's in the same boat.

It was noted in some interview discussions that participants often described discussing topics such as emotions and mental health in an indirect manner with other prisoners. For example, one participant explained, "We all talk about emotions but again, depending on who you're talking to and the relationship you have, it seems like really dulled down. […] You might say, 'Things are shite'." Similarly, another participant stated:

> The one word that explains every situation in prison and to all prisoners is 'jail'. "What you up to the day?" – "Ach, it's just the jail, it's just the jail" and that word 'jail' answers a lot of things; depression, anxiety, just the way you are.

Another participant further described this indirect discussion of sensitive topics:

> If you've got a guy that's been through depression and knows the symptoms almost and if he sees it […] he's no gonna go, "I know you're depressed", he'll go, "Alright mate? Shite the day, isn't it?" […] they both know what they're talking about but it's just never openly addressed.

One participant gave an example of a time when speaking to another prisoner had helped him to understand emotional issues he was experiencing, but explained that he had to be careful in the language he used during this conversation due to the risks associated with discussing this topic:

> For years you suppress your emotions in here and then they were just coming to light recently […] I didn't know what was happening but I was talking to a guy and he just *snaps fingers* said something that made me twig [understand] […] I kind of just, "Well, is it no just because of…" without saying words like 'emotions' or anything like that […] I had to articulate the conversation without making him feel weak [...] There's only one thing that people respect in here and that's strength, and you only gain that through violence; unfortunately, that's the environment we're in. […] So you need to watch who you talk to or how you talk […] I've been in here [detail removed] year, I know how to navigate through conversations; that's only through experience.

4.4.2 Prison officers

Twenty participants (83%) discussed prison officers as a source of information, generally on the prison regime. For example, one participant stated, "If it's related to maybe the facilities in the jail [...] generally you'd find that information quite easy at the [prison officers'] desk at the end of the hall." Another participant stated that he often asked prison officers questions such as "Gonna check my PPC?", while another stated that he would ask prison officers about "visits and things like that". One participant explained that seeking information from his personal officer (a prison officer assigned to specific prisoners as a first point of contact throughout the duration of their sentence) was useful, explaining, "If she can't give me the answer, she'll find someone who can."

Several participants explained that prisoners often approached prison officers for information due to this groups' ability to access the internet. For example, one participant stated:

> There's staff in the hall obviously that have got access to Google [...] You would ask and say, "Look, could you do us a favour? Can you look on Google and find out x, y, and z for us?" and if it could be done, they would do it.

Another participant explained, "I have asked officers in the past to Google search phrases to see if any information comes up [...] They don't mind helping with things like that, it's not an issue", and another, "If I went and asked them just like, 'How many times have Rangers won the Champions' League?' just say, right? […] Sometimes they would do it, sometimes they wouldn't, depending on who it is."

Prison officers were often described by participants as varying in terms of approachability and helpfulness. For example, one participant explained, "With the prison officers it's really a case of who you go and see and what that information is, and then again, some prison officers [...] you just wouldn't really bother asking them for the information." Another participant stated, "Some of them are willing to help you and other ones will just bam you off", and another, "Some ones you'll look at and the way they act you think, 'Right, I'm no asking him. I'll wait until he's away dubbing [locking] up somebody's door and then I'll go and ask her.'" Similarly, another participant explained,

> Some people are, you can just tell by their attitude and their demeanour and that, that they are wanting you away from the desk, that you're doing their nut in, and other ones, if you ask for something to be checked on the computer or that, it's like, "Aye, no bother" and it's alright.

Offering insight into one reason why prison officers might not always be able and/or willing to assist prisoners with their requests, one participant explained prison officers were often responsible for a large number of prisoners and reflected that this could be potentially overwhelming at times:

> You've got over sixty prisoners and potentially over sixty prisoners asking for information [...] I would say that some officers can be overwhelmed because it is a lot; a lot of people have different needs, emotional needs or relationships, families.

One participant stated that he felt prisoners could improve their chances of obtaining they information they were seeking from prison officers by waiting until this source was less busy:

> If it's canteen day and you've got seven guys at the desk holding canteen sheets saying, "I ordered this and they sent this!" and "This is wrong and that's wrong", don't go up and say, "Is there any chance you can…?" Just chill it out, wait until the desk gets a bit clearer and there's nobody about.

4.4.3 Healthcare professionals

Eighteen participants (75%) discussed healthcare professionals (i.e. doctors, mental health staff, and nurses) as sources of information on topics such as physical injury, medication, and mental health.

Several participants discussed doctors as a source of information. For example, one participant stated:

> Well, I went down to the health centre actually to see about my knee. [...] I spoke to the doctor, and he said the best thing to do is rest it, but then I've still been getting problems so I'm going to have to go back down to find out more information.

Another participant expressed dissatisfaction at the waiting times and limitations of prisoners' appointments with doctors in the prison:

> Well, they can make you appointments, but it can be months [...] and the sheet of paper comes back saying, "You're only allowed to talk about two things at this appointment" [...] like symptoms or whatever. […] so, if you've got three things, you need to decide which ones, which two are more important, which one could wait potentially a month longer.

Similarly offering criticism, one participant explained that he felt prisoners were given too little time with doctors in light of how long they might have waited for their appointment:

> Outside obviously, when I used to go to the GP, it was more like ten, fifteen minutes and you got to sit and explain, but in here it's three minutes, in and out, and you've had to wait like three months.

Mental health staff were also discussed by several participants in relation to seeking information relating to mental health and associated issues. For example, one participant explained:

> I'm on anti-depressants myself […] I started talking to mental health and I was just worried about getting out and I started getting all these thoughts in my head, "Should I come off them? Should I stay on them?"

Another participant stated that he had to deal with his stress himself due to difficulties accessing mental health staff in the prison; "I had to deal with it myself […] I saw the mental health worker […] he said he would come down the next day and I've never seen him since." Another participant explained that he suffered from mental health problems but choose not to attempt to seek help from mental health staff because of the difficulties of accessing this source; "I know I could put a referral in to see the mental health but again, they take too long and it's a pain in the arse."

Some participants discussed seeking information from nurses on health-related topics. For example, one participant described the procedure prisoners had to follow to get an appointment with a nurse:

> A triage, a medical form at the end of the hall, you do that and write on it whether it's a physical problem or a mental problem […] It goes into a red box so staff [referring to prison officers] wouldn't see it. I think the nurses come and collect it […] because you've maybe got some sort of thing you didn't want people to know about.

One participant described an unsatisfactory experience of trying to seek information on managing pain from nurses and how this influenced this willingness to interact with this staff group in future:

> The nurses came up, looked at me and I told them I'm in severe pain and because she's looked at me, she's went, "You're a big strapping lad. You can handle this". So, I felt as if she just kind of stroked me under the chin, stroked my ego [...] I went through the complaint procedure in here […] I was told they followed their job to the expected standard, and yet I was still in pain […] I wouldn't even ask for anything again, so I just bear it, and I am in pain but I just get on with it now.

Some participants expressed a general dissatisfaction with the general healthcare service provided to prisoners. For example, one participant stated, "The quality of the medical information provided is, from my experience, insufficient if not hazardous", and another explained:

> There's nobody there to get information off of straight away. [...] There's guys that, like hypochondriacs […] that knock themselves into panics, make themselves really no well by thinking they've got something that they've no got.

4.4.4 Family

Seventeen participants (71%) discussed family as a source of information on a variety of topics. For example, one participant explained, "Concerning administration things and stuff like that, I think

family is probably the most reliable source of information." Another participant explained that he sought educational information from his family but felt bad sometimes asking for this:

> And family [...] it could be materialistic things and things like that, or information about studies but I know that I can trust them and rely on them, they'll get the information I need; again, I still feel bad asking because I'm like, "Oh, if you've got five minutes can you find…?"

Another participant explained that he had sought information on the birth of his niece from family members; "When my sister had her wee daughter last year obviously, I was asking like what was happening; 'Has she had the kid yet?', this and that, so I had to find out all that through my family."

Several participants described other needs which were met by speaking to their mothers. For example, one participant described the positive impact of speaking to his mum on the phone on his self-esteem:

> We just talk about mundane things. [...] it humanises you in a place where most of the time you feel like an animal. […] It's… the media's out to make us sound like demons and monsters and… just anything other than human. And having just a half an hour phone call with my mum about stupid things just makes me feel alive and normal… and childish because it's my mother.

Another participant explained that speaking to his mum helped lessen his feelings of loneliness:

> My mum's a good one; I don't phone and say, "Oh, I'm lonely" but I can spend 25 minutes on the phone talking rubbish and it just helps so much without even needing to say, "Oh I'm feeling down today. I'm a bit lonely". She's always got the time to talk about rubbish.

Participants' discussions highlight the value of prisoners having support from family during their sentence. For example, one participant stated:

> Family contact, family bonding […] I mean, for me that's key to going through the system in a healthy manner. It's all about stability and ambition and that drive to go forward and not to come out with nothing, no one, and angry.

Similarly, another participant explained, "It's extremely vital to have that connection with your family on the outside… because having a support network is what helps; it's another coping mechanism inside a harsh environment." Another participant stated, "I've got my family [...] I can go to them if I need any help, whatever it is, opinions, money, anything, they're there for me. [...] even when you don't need it, you know it's there." One participant explained how his family would be his first port of call for anything he needed and that this helped him to cope with prison:

> My family is the biggest help to me in here; emotionally as well. [...] I always get a good laugh and that [...] talk about stuff that I couldn't talk to anyone else about. [...] I know they're there for me all the time, so I'm looked after and if I ever need anything I just say, if I ever need any help, they're gonna be there for me, and that's the first people I'd go to if I needed anything.

4.4.5 Teachers

Sixteen participants (67%) discussed teachers as sources of information, often relating to education. For example, one participant stated, "I'll tell you, the teachers are probably one of the best sources of information with regards to the learning activity side of things." Another participant explained that he found it more beneficial to ask teachers questions relating to education as opposed to prisoners:

> In terms of education, you're probably better asking members of staff. I've found that to be more helpful to be honest, rather than asking prisoners because some people will give you their opinion and it can be like something completely different.

One participant stated that he would approach specific teachers depending on his questions:

> Well, I know all the different teachers that know all the different things so if it's about one thing you can go to certain ones. […] Say for like poetry and that, there's one that's good with poetry so I'll go to her for that, then [English teacher], she's good for the English work and all that so I'd go to her for things like that.

Several participants discussed approaching teachers due to their ability to access the internet (similar to prison officer requests). For example, one participant explained, "I'll ask somebody in education. I'll say, 'Could you google that for us?' [...] As long as it's information that's educational or whatever, they'll certainly give you, they'll certainly go onto google for you." Another participant stated:

> Tutors [referring to teachers] up here that will do that. See if there's anything I'm doing with the OU, I'll just tell them what it is, and they'll go on [the internet] and try to get as much information as they can and just print it off for me so it's no bad that way.

And another stated, "Just ask the teachers up here if I'm stuck with anything. They can look on the internet and help you with it as well."

Participants frequently discussed teachers positively in interviews. For example, one participant explained that prisoners appreciated this staff group due to their genuine desire to help prisoners:

> As prisoners, we will give more time to civilian staff who are not part of the SPS because they're in here, they're in here to help us. They're in here to help us get qualifications, to

> help us improve ourselves intelligence-wise before we even get close to walking out those doors.

Similarly, another participant stated, “Civvy [civilian] staff treat you like a student and not a prisoner. It’s not like anywhere else in the jail. […] Civvy workers up here are always helpful. They’re nice people.” Another participant explained that having a positive relationship with teachers could help improve prisoners’ chance of getting help when required; “I think when you have a good repertoire with the teaching staff then they’ll help you out when you need help.”

4.4.6 Media (i.e. television, radio, newspapers, and magazines)

Eleven participants (46%) discussed seeking information on topics often related to personal interests from a range of media platforms, including television, radio, newspapers, and magazines.

Some participants discussed television as a source of information in the prison. For example, one participant described the benefits of obtaining information via television:

> I think television and things like that are one of the main sources of information in respect of whether it be education or issues like sexuality or things like that, because you’ve got all these programmes on television […] they end up watching it because there’s nothing else on and they might learn something or they might take the piss out of it, but that’s how I would have said that’s how most people get information, from the telly. [...] I would have said it was safe, because at the end of the day, no one knows what you’re watching.

Another participant explained that watching television during lock up times was useful in helping him to “forget for a few hours” about his feelings of depression:

> If you’re watching that and you’re getting a laugh, an hour goes by and you’re like that, “Fucking hell!” and you’re laughing, and it’s made you feel better. Whereas if you’re sitting there feeling depressed overthinking things then it’s longer, isn’t it?

Some participants discussed using the radio to seek seeking information on sport and current affairs. For example, one participant stated, “If you were out looking for - sports a good one for me - you’ll maybe say, “Oh, what was the score?” […] guys will get the radios on”, and another who stated that he was interested in politics, explained, “most of the time I just listen to the radio. [...] I listen to the LBC [Leading Britain’s Conversation]; it’s a news thing.”

Newspapers were also discussed by a couple of participants as a source of information on local news and current affairs. For example, one participant stated, “I read the newspaper, aye. […] I read things about Glasgow […] about the Gangland wars in Glasgow”, and another, “I order newspapers and I get those every day. I like to keep up to date with all the sport and stuff like that, stuff about Brexit.”

One participant discussed magazines as a source of information, explaining that prisoners could order "fishing magazines, car magazines, whatever guys are in to", but adding that despite subscribing to a monthly magazine to keep updated about his own interest in music, "I'm no really even keeping up with it because there's a section at the back that will have a reviews page and there will maybe be like nine tunes that have come out that month."

4.4.7 Solicitors

Five participants (21%) discussed solicitors as a source of legal information. For example, one participant explained that he had sought information about his ongoing cases from his solicitor at the beginning of his prison sentence:

> When I was in [HMP Anon] and I still had cases ongoing, he would need to come up and talk to me [...]he would show me statements or whatever he had, ask me how I was planning on pleading, he would tell me his opinion.

Another participant gave an example of a time he had sought assistance from his solicitor when trying to find out his position on the waiting list for his assigned rehabilitative programme:

> I was [detail removed] year late in getting on a programme and I got told I was thirty-odd on the list, so I got a lawyer involved and within two months I was on a programme. [...] They helped me so depending on what you need them for, I would say they are helpful.

However, the same participant added that he would have preferred more face-to-face time with his solicitor whilst trying to resolve the issue, explaining, "Well I was able to phone my lawyer and then they were coming up maybe once every three weeks but it's only for a wee ten-fifteen minutes, so it was no that good." Similarly, another participant commented:

> They are quite ruthless solicitors really, in terms of their approach, you know, the way they deal with people after they're sentenced because at the end of the day, the money tree stops then. [...] I see loads of solicitors come down and spend as little time as possible with their clients. They spend, maybe take their client into a room for ten minutes, five, ten minutes and then they're away again.

One participant felt that the prison could help prisoners to address their legal information needs by offering a legal assistance class with an intermediary to support prisoners to access legal information:

> A good suggestion is to have somebody [...] like a class basically [...] somebody who, as a lay person, can possibly assist [...] Because it's the same that you have listeners here if you have emotional problems or stress-related problems or family-related problems, they should do the same thing basically for people who have legal issues.

4.4.8 Learning centre resources (i.e. legal texts, encyclopaedia software, and library books)

Five participants (21%) discussed learning centre resources, including legal texts, encyclopaedia software, and library books, as sources of information relating to educational and the law (it was noted that information needs addressed via these sources were often task-orientated; e.g. information required to prepare a legal defence or to complete academic assignments).

Some participants discussed seeking information via legal texts (which are often stored in prison libraries). For example, one participant commented:

> The law books aren't up to date, so it's difficult to access that information […] a lot of the prisoners in here are reliant on their solicitors and some of them find that once they're sentence and they've started their sentence, their solicitor doesn't bother with them anymore, so to be able to have access to the legal books would be important; they should be actually on display and accessible.

Another participant described issues relating to the length of time prisoners were permitted to access legal texts in the prison library:

> They have also here, a legal library, but you're not allowed to take them [legal texts] away which in my view, is a disadvantage. […] when you go up for 15 minutes or 20 minutes for library because it doesn't take hours here, then how can you read something through, how can you study it? Because technically you have a right to defend yourself and how could you do that if you don't have access to the books?

A couple of participants mentioned the encyclopaedia software available on learning centre computers as a source of information. For example, one participant stated, "You can get Wikipedia School […] but it's limited. […] there's only a set amount of things that are already on it", and similarly, another participant explained:

> Well, you're quite limited, aren't you? They've no got internet, but they've got the… the encyclopaedia thing [...] It's limited. It's only got, you could be… well, I like history so there could be certain things that will be on it, but I could type in other things, and it won't be on it.

One participant discussed using library books as a source of information when seeking information required for a class presentation but highlighted the inability to seek current information from these:

> I needed information to find out what colour the German army outfit was back in World War One. [...] I went to the library actually and I saw a World War One book. […] I can use it [the library] whenever I need […] But it's only good for information that's past. It's no

> really good for anything that you want to find out just yesterday [...] I'd need to go check that on the internet because I wouldn't see it in a book.

4.4.9 Friends (outside of the prison)

Five participants (21%) discussed friends (outside of the prison) as an information source. For example, one participant described drawbacks of relying on his friend for information on new movie releases:

> I like to know what movies are coming out […] I've got, well obviously, a designated pal that does it all for me in one clean swoop and then he'll come to a visit or a phone call [...] Well the thing is, when somebody else does your research then you're getting their insight […] their opinion's gonna be different from your own.

Another participant explained that if he heard a song on the radio that he liked but didn't catch the title or band, he would write down some of the lyrics so that he could phone a friend who could then look it up online, but he would often have to wait several days before getting an answer.

Offering insight into why prisoners might not seek information from friends, one participant explained:

> I think things like that would just annoy guys in here, like see phoning up when your pals are doing things. […] None of my pals have really been in the jail or that. [...] I don't know, it's like, I was going to say it's as if I don't care what they're doing *laughs* or something, fuck knows. Maybe it is. […] So, if people are going to Ibiza and all that out there then aye, you can be a wee bit annoyed like, "I wish I was out there going to Ibiza" but there's no reason to… […] It's no their fault they're no in the jail.

Similarly, another participant stated:

> I know it sounds stupid, but like see because I'm here and we can't really enjoy ourselves, for a while there, my pal was always writing to me and saying, "We're going to Zante" or "We're going to…" and things like that […] Well, obviously he's no doing it in a bad way, but I'm reading this thinking, "Man, he's having a great time but I don't know why he's saying this". […] So that's just information I don't need to hear. […] Things like that, I would rather not know.

4.4.10 Printed prison resources (i.e. posters and the prison induction booklet)

Four participants (17%) discussed printed resources which were provided by the prison, such as posters and the prison induction booklet, as sources of information.

Several participants discussed posters on display around the prison as sources of information. For example, one participant stated, "There's a gym timetable. Things about health, like if there's a scare.

I've seen ones up about pills being in the jail, like fake Valium or whatever." Another participant stated that he felt the posters on mental health displayed in the prison offer limited information on where to seek support for associated issues, explaining, "The problem with the posters is, as you've probably seen yourself, is that they say, "Talk about it" but they don't really offer many options or outlets to do so." One participant explained that he felt that it would be useful to have posters displayed around the prison providing guidance for prisoners who were approaching their release:

> It would be good to have a poster selection [...] The steps you go through, "This is what you have to do when you're released from prison" [...] "This is the numbers you have to gather", "This is the websites you have to log on to…" [...] because it's even Universal Credits and all that now, it's all changed […] after such a long time in prison, people don't realise just how frightening it can be when you hit that street.

Some participants discussed the induction booklet given to prisoners when they first entered the prison. For example, one participant felt the information contained in the induction booklet was insufficient to meet prisoners' needs, explaining, "It's the basics so maybe gym sessions or maybe that you can see the nurse or that, but even at that it's not comprehensive enough." Another participant felt that some of information contained in the induction booklet was misleading:

> The booklets here that are published are often misleading because they put things in it which are not true or which are not accurate. […] they tell you that you can have a visit every day of the month […] you can actually have two visits a day, that's the new guideline since 2015.

4.4.11 Social workers

Four participants (17%) discussed social workers as sources of information but predominantly in negative terms. For example, one participant stated, "Social workers deal with lots of prisoners so it can feel like you're being rushed". Another participant stated, "Social work and whatever, they've made themselves available professionally, and personally, and ethically," but went on to contradict this statement later in the same interview (perhaps due to increasing trust of the researcher):

> You can imagine through all these years, how many times and how many interviews and how many rooms they've been telling me I can get this, and I can get support, and I can get help with that and, "We'll be here for you" and see when I needed them, they never bothered.

A couple of participants stated that they did not wish to be involved with social workers due to the influence they could exert over prisoners' lives. For example, one participant explained:

> I've been in the hall and see with social workers and stuff, see if they try to mention my family, I shut them down straight away. I say, "Don't talk about my family. I don't want my wane's name coming out your mouth. It's nothing to do with you" and they're like, "Oh, but we're just asking" because I know what they're trying to do; they're trying to worm their way in […] they make out that things are bad and then they think they can make them better. […] They might have good intentions and that, but that good intention to me, personally, it will always turn into them trying to be one step above you.

Similarly expressing a reluctance to interact with social workers, another participant stated:

> I just don't like, I just don't want the social work in my life. I think they've got too much pull and too much, too much say in your life, and I don't want them to have that type of say in my life. […] I just try not to get involved with them at all.

4.4.12 Listeners

Four participants (17%) discussed Listeners (prisoners trained by the Samaritans to provide emotional support to their peers) as a source of information and support. For example, one participant stated, "You have Listeners here if you have emotional problems or stress-related problems or family-related problems," but went on to add, "you can't discuss stuff with listeners that either affects your case or the security or violence or drugs because then they're supposed to report it." Highlighting others limitation of this source, one participant explained, "Listeners can only listen; they can't give advice", while another commented on the restricted hours of access in Scottish prison:

> If your head's not right and you want to talk to somebody, just someone to listen, they can come anytime because down south [referring to England] because it's 24 hours a day. You can call the number from your cell or the person will come to see you, but up here, it's only available during open times […] Imagine you're behind the door and you need to speak to somebody, because usually bodies are found in the morning, they've hung themselves or harmed themselves; that usually happens during the night.

4.4.13 Prison chaplains

Three participants (13%) discussed the prison chaplain as an information source. For example, one participant explained that the chaplaincy was potentially the only place prisoners could go to discuss negative emotions relating to their crimes:

> One particular person I speak with, for example, he committed a murder […] he is already having a lot of supressed anger, supressed rage, frustration, desperation, and he cannot voice that to officers because there's no information pathway provided where they tell

> him, “Yes, you can provide that information confidentially and without penalty”; the only way that possibly exists within the prison is chaplaincy, like going to the church to go to confession.

However, the same participant went on to describe the difficulties he faced when trying to speak to a prison chaplain about the negative effect his appeal was having on his mental health:

> People with suicidal thoughts maybe go to the chaplaincy, but even they say… because I spoke with the lady too, because I had lots of stresses too which had become a problem, and she said, “Don’t tell me anything about the case because I know you’re an appellant [prisoner appealing their sentence]. Don’t tell me that you want to commit suicide because I will have to report it to the officers”.

Another participant who was imprisoned for murder explained that had questioned his morality at times during his sentence and while aware the chaplaincy offered support programmes, he felt this wasn’t the right place for him to seek answers due to the religious context:

> I’ve had thoughts like that, “Am I evil?” and I know there’s things like, when it comes to the church, they have different programmes – I think one’s called Sycamore or something like that – but it’s to try to investigate forgiveness and things like that, so they do provide something like that, even though they only have it every so often so not many people know about it. But even at that… with things like that, you think, “Oh, it’s Christian-based, it’s religious, it’s…” and that’s not what you want.

4.4.14 Prison librarian

Three participants (13%) discussed the prison librarian as a source of information often in relation to books and educational materials. For example, one participant explained that he would ask the librarian about which books were available to browse and/or loan from the prison library. It was noted that participants often referred to the researcher’s previous role as a prison librarian in interviews as opposed to discussing the current librarian (perhaps to avoid drawing comparisons between the researcher’s time in this position and the current librarian). For example, discussing the benefits of interacting in a friendly manner with the librarian, one participant commented:

> You know, just knowing you since you were a librarian. Just living in hope, know what I mean, that maybe somewhere along the lines I’ve helped you, maybe I’ve helped you and you’ve helped me with your “Hellos” or cheery wee smile or *laughs* you know?

Another participant explained that he felt the librarian was perceived by prisoners as different from other operational prison staff (e.g. prison officers) because they were not associated with the punishment regime of the prison:

> I would have no issue with you being the librarian because you try to help and you try to provide literature and you know, escapism and things like that. You're not there to say, "Oh, I'll punish you. You don't get the book" type of thing.

One participant commented on the value of reading groups facilitated by the librarian for supporting prisoners' mental health, explaining, "I mean things like, to go back to one of your earlier ones, book groups, whether it's book groups and such for supporting mental health is one thing".

4.4.15 Addiction support services

Three participants (13%) discussed addiction support services provided by prison addiction support workers in collaboration with external agencies (e.g. Alcoholics Anonymous). For example, one participant stated:

> There is a lot of help in here, I'll say that, for guys if they want to come off [drugs], they've got the recovery café [...] I just kind of done it myself but I've stole things out of the programme like that 'one day at a time' thing.

Another participant discussed the benefits of having prisoners facilitate addiction support classes:

> I done a two-day training programme, SMART programme, which is like trying to get people off drugs so I'm facilitating to take a course with ten guys in the class […] things like that, cons would rather talk to other cons about those things rather than screws.

One participant criticised the lack of anonymity for prisoners who used addiction support services:

> Support groups, it's a nice idea but… because you get like the recovery cafés for the people that take drugs and things like that. [...] I went along with someone as support. I was brought in as support, which is fine, but then it was on my record that I had attended Cocaine Anonymous! [...] the point is that it's not anonymous. […] I don't care that it's a jail, there's still got to be some degree of confidentiality.

4.4.16 Physical training instructors

Three participants (13%) discussed physical training instructors (PTIs) as sources of information, generally in relation to physical health. For example, one participant explained:

> The PTIs, they're pretty helpful with that. [...] What kind of things would I warm up with, like what days to do it on, what days to do it, how many days and what rest between it,

> so they were helpful for that with me. And then obviously with people just starting out, they'll show them how to use the gym or whatever.

Another participant stated:

> Maybe down the gym, you're maybe asking them to print you off a workout routine or ask what the best thing to be eating is […] they just tell you to bring a menu down and they'll tell you what to pick off the menu.

Another stated that he had sought information from a physical training instructor on the types of exercises he could do to help recover from a shoulder injury when he had been unable to get an appointment with a healthcare professional.

4.4.17 Overview of sources of information

In summary, findings of this study offer a useful overview of the range of information sources available to prisoners and factors influencing interactions with these. Analysis of interviews identified a range of interpersonal sources of information which were commonly discussed by participants, including other prisoners, prison officers, healthcare professionals, family, and teachers. Also discussed but more often in terms of limitations, were forms of media (i.e. television, radio, newspapers, and magazines), solicitors, learning centre resources (i.e. legal texts, encyclopaedia software, and library books), friends (outside of the prison), printed prison resources (i.e. posters and the prison induction booklet), social workers, and Listeners (prisoners trained by the Samaritans to provide emotional support to their peers). Discussed to a lesser extent were the prison chaplain, prison librarian, addiction support services, and physical training instructors. Professional staff were often approached for information considered relevant to their role (e.g. prison officers for information on the prison regime, healthcare professionals for health-related information, teachers for educational information, and solicitors for legal information). Other interpersonal sources were approached for information on specific topics for reasons such as lived experience (e.g. seeking information on the prison regime from other prisoners) and trust (e.g. seeking information on sensitive topics from).

4.5 Issues influencing the meeting of information needs

This section presents findings which evidence issues that can influence the meeting of prisoners' information needs. Table 3, on the following page, presents the issues discussed during interviews, grouped and categorised by the researcher, and listed in decreasing order of the number of participants who discussed each issue. As in previous sections, categories do not necessarily represent a comprehensive list of issues influencing the meeting of prisoners' information needs but reflect

those discussed by participants of this study. Again, frequencies (rounded to the nearest whole number) do not necessarily indicate significance of issues as they simply reflect what participants chose to discuss and/or recalled during interviews. Findings which evidence issues are presented in the order they appear in the table.

Table 3 Issues discussed by participants

Category	Number of participants	Percentage of participants
Lack of internet	16	67%
Risk of stigma	15	63%
Telephone access and privacy	14	58%
Distrust	13	54%
Low self-esteem	13	54%
Family contact via visits	11	46%
Drug-induced states	10	42%
Isolation during lock up	5	21%
Risk to sentence progression	4	17%
Misinformation and disinformation	4	17%

4.5.1 Lack of internet

Sixteen participants (67%) discussed prisoners' lack of access to the internet as an issue which can negatively influence the meeting of prisoners' information needs, on topics relating to education and recreational interests.

Several participants described the impact of the lack of internet access on their ability to seek the information they required for Open University courses. For example, one participant described issues around having to rely on staff to seek information from the internet on his behalf:

> I'm a university student with the Open University and there are times when I have to go to a member of staff in the learning centre to get information from the university website […] trying to explain to a member of staff, who probably hasn't studied with the university before or has any connections with it before, trying to direct them when I've never been on it, it causes a lot of problems.

Another participant explained that the lack of internet access made it difficult to study for his undergraduate degree and left him uncertain as to whether he would be able to do a postgraduate degree in future:

> It makes it more difficult to do the degree and I think it's just going to get worse. [...] I'd like to do a masters but again that is, that is independent research in itself [...] I need the internet, I need a bloody laptop realistically. [...] But I'm not gonna have anything like that [...] So I might not be able to do my studies.

A couple of participants explained how not being able to access Open University student forums left them feeling cut off from other students on the course. For example, one participant described feeling "stuck in the dark", explaining, "I cannae go on the module website or anything or on a forum or anything and speak to anybody else doing the course." Similarly, another participant stated:

> The other frustrating thing for me is the fact that I don't have access to the student forum […] I can easily talk to other students in here that are doing university courses, but I can't bounce off ideas with them. [...] It does feel quite lonely sometimes.

Also evident in discussions was the impact of this lack of internet access on information seeking in relation to recreational interests. For example, one participant explained that having to seek source material inspiration for his paintings from the internet via prison staff meant that he did not always get what he was looking for:

> I've got a vision in my head and it's really hard to translate to somebody to get the same picture as you. So I'll say, "I need a picture of an old boot but it needs to be in isolation", and I'm trying to convey this to one person, and a member of staff who is sitting two chairs away, says, "Oh, what you should look up is…" […] And you don't want to go, "No, no, gonna do this" because they're already helping and you think, "I just need to take what I can get here".

Another participant described the discouraging effect of being continually directed towards the internet by external agencies when attempting to seek information to prepare for his appeal:

> I don't know what the Supreme Court does. I don't know who sits on it. I would like information about the Supreme Court. [...] Every organisation points you towards the internet – "It's on the internet. All the information is on the internet" but you feel so frustrated because maybe they don't realise that you don't have access to the internet [...] It puts you off kind of keeping the fight going at times. You kind of feel like, "Well, what's the point?"

Some participants felt that Scottish prisons were 'behind' other countries for not allowing prisoners' internet access and discussed various benefits of introducing such technology for prisoners. For example, one participant described Scottish prisons as "way behind the times" and suggested the introduction of supervised internet access for prisoners studying university degrees for limited purposes (e.g. communicating with other students):

> I think it would help and there'd be an easy way to police it. You just, it'd be like Skype or whatever, and you just have a member of staff or a teacher sitting there, and you're warned, "Listen, if you ask this person any silly questions or anything outrageous or that, you'll be took off the course."

Similarly, another participant described Scottish prisons as being "in the dark ages" and suggested that providing prisoners with a personal computer device could help lessen some of the administration work for the prison while potentially also supporting prisoners' rehabilitation:

> At the moment, everything from your canteen to ordering fruit to booking a visit, everything is done in paper form which must create work for the prison as well to process it, and if that could be combined with, for example, the tablet if you like, then that could be used for educational purposes, it could be used for emailing, it could perhaps even be used for telephoning even further down the line [...] that again would stop the tension in the halls and help build relationships between prisoners and their families, which is obviously going to help rehabilitation for a lot of people.

4.5.2 Risk of stigma

Fifteen participants (63%) discussed stigma as an issue which can influence the meeting of prisoners' information needs, including the risk of ridicule associated with revealing weakness to others, the risk of bullying from being labelled an informant, and issues relating to prejudice and discrimination.

Several participants discussed the stigma associated with mental health needs. For example, one participant explained, "There's a stigma about depression in prison", and another stated:

> Mental health is probably one that, probably actually one of the biggest things in here that guys generally won't talk about. […] It's actually that we as prisoners, as men in a prison it's… we try not to show any weakness.

Similarly, another participant stated:

> I think some people would probably view mental health like that where other people would laugh at them or stuff like that, so they wouldn't want to talk about it. […] it's a guy jail so everybody's all macho'd up and don't want to be seen as being weak.

Another participant stated, “I think guys think, ‘I need to be tough’ […] if I say, ‘Oh, my sentence is getting to me, people are gonna take the piss out of me.’” One participant felt that prisoners’ lack of awareness or feelings of embarrassment relating to mental health issues could negatively influence interactions with potentially valuable information and/or support services:

> The prison doesn’t care enough. […] You can’t just say, “Oh, we provide this. There’s a service. There’s a service. You can get a mental health nurse if you want”, just because that person might not realise they have a mental health issue or, worse than that, they don’t want to talk about it. They physically… they can’t bring themselves to do it because it can be embarrassing.

Participants’ discussions suggest that stigma is also associated with literacy issues in prison. For example, one participant explained that he had reading and writing difficulties and was willing to ask others for help, when necessary, but he felt other prisoners often hid such issues from others; “I’m honest with people. I don’t hide it. [...] There is other people on my landing, it’s that way, and they hide it.” Offering insight into this reluctance to reveal literacy issues, another participant stated:

> There’s like one guy I know that’s well over his days because he can’t read or write […] he would rather come to me to ask for help than ask a screw for help. [...] I daresay that the screws wouldn’t belittle him just because he can’t read or write but some people might think that.

Another participant commented on prisoners’ tendency to hide literacy issues and reasons for this:

> When I was a peer tutor and I was learning boys how to read and write […] the hardest thing was them admitting they couldn’t read and write in the first place. [...] they put up a wall, they’d rather fight you, make up a completely different reason than say, “It’s because I cannae write” [...] because weakness is a thing you cannae show in here.

One participant highlighted that stigma could also be considered a risk with showing emotions in response to relationship issues in front of other prisoners:

> I’ve seen it happen [...] People taking the piss out of a guy because he’s split up with his girlfriend and he’s upset and that, but obviously if you love somebody and you split up with them, you’re obviously gonna be upset, that’s natural. But they think to themselves, “I cannae show that in here. If I show that, I’m gonna be showing weakness.”

Further evidencing issues relating to stigma, some participants explained that they were reluctant to seek help from staff on behalf of other prisoners for fear of being viewed as a ‘grass’ (i.e. informant). For example, one participant stated:

> There's so many people that you can see are clearly, they clearly need help [referring to mental health issues] [...] when do you step in and say, "This person needs help" because is that your responsibility? Or is that fair? Because there's a line there; what's grassing? What's not?

Similarly, another participant stated:

> There's various people at the moment who say they are considering suicide, but I can't go to the officer because obviously then I'm ratting them out and I'm a grass, and they don't go themselves either because they'll be put in a suicide cell. [...] So what can you do about that? There's nothing you can do about it. You can't help them.

Related to stigma, also evident in interview discussions were issues relating to prejudice and the discriminatory treatment of prisoners which could influence trust and information seeking and sharing with certain staff groups. For example, discussing prison officers, one participant stated:

> There are gonna be members of staff in particular and I think we all know some that, yeah, you wouldn't go to them or you can't trust them, or they have that attitude, that old attitude of, "They're just fucking prisoners" or, you know, "They belong here" kind of thing.

Discussing healthcare professionals, one participant expressed the view this staff group often applied a drug-seeking stereotype to all prisoners; "Well, barriers from doctors I can easily say is stereotyping; they think everyone of us is at it for tablets." Similarly, another stated, "They think we're all chasing medication", and another, "I don't bother going up there because you feel as if they see you as if you're just trying to chase it, trying to get drugs off of them."

One participant felt that agencies outside of the prison also discriminated against prisoners:

> When you're trying to research anything or trying to do anything, as soon as you're, as soon as you mention you're at HMP Shotts, you're at a disadvantage with any agency, which is wrong. I mean, I've wrote to councils [...] to the Legal Aid Board to the Lord President, and you're disadvantaged as soon as you're known as a prisoner in my view. [...] I would say that you really have to push hard and quote things like the Freedom of Information Act and even that has restrictions as well.

4.5.3 Telephone access and privacy

Fourteen participants (58%) discussed issues relating to prison telephones which could influence prisoners' ability to communicate with potentially valuable sources of information and support, including the high cost of calls, limited number of telephones available, and lack of privacy during calls.

The reportedly high cost of phone calls was frequently discussed as an issue which influenced prisoners' communication with family. For example, one participant stated:

> The price of the phone as well seems relatively expensive in this day and age [...] you have to choose every week between health, hygiene, and family contact; for example, do you buy that shampoo, or do you keep that one pound or whatever to put on your phone and spend an extra ten minutes on the phone with your family?

Another participant stated:

> I find the phone calls are expensive. […] I mean this week I put a tenner on the phone. Now if I'm phoning my dad who's got a mobile, my daughters work so they've got mobiles, my brother, my mum, so you cannae always catch them in the house, the tenner doesn't last, it doesn't last me to the next week.

Similarly, another participant explained, "It's very expensive to call here […] I spent the week before, from £28 I bought a toothpaste for 86 pence and the rest of the money went on the telephone."

Several participants also described the limited number of telephones available for prisoners' use as an issue which influenced their ability to communicate with family. For example, one participant stated, "There aren't a sufficient amount of phones accessible. I think there's six phones for sixty-five, seventy prisoners so some of those phones are busy all night." Similarly, another participant explained:

> Telephoning is a problem. We've got three phones for thirty-six prisoners and the times that we can use the phone is limited, and what we're finding in the halls is that it's causing, ehm… tension, shall we say? Where prisoners are going on the phone for long periods of time so other people can't get on the phone when they want to phone.

Again, similarly, another participant stated:

> I find there's no enough phones as well. [...] So, there's only, there's six phones in the hall, there's sixty-four guys. Now everybody's wanting to rush out at half past 6 because their families are all finished work and they're all, "Right, hello, what's happening?" [...] So they things are frustrating at times.

Another issue evident in discussions was the lack of privacy during telephone calls due to the monitoring and/or recording of phone conversations by staff, which could negatively influence communication with outside sources such as family and friends. For example, one participant explained, "I can't have a proper conversation […] you just don't feel comfortable talking because you know it's all recorded on the phone." Similarly, another participant stated, "They're listened to so

you're not wanting to go into any private stuff or anything like that […] You keep a lot to yourself, and they say if you bottle things up it's no good for you." Again, similarly, another prisoner stated:

> It's kind of an invasion of your privacy so if you want to talk to your family about stuff that's happened in the family, that you don't want anybody else to find out, then it's kind of defeating the purpose of having a phone.

Some participants also described the lack of privacy during calls due to the location of prison telephones as having a negative influence on their communication with family and friends. For example, one participant explained:

> They're pretty much next to peoples' [prisoners'] cells so you're on the phone and if you do want to talk to family about a certain thing, I don't know, say for instance somebody has died and you don't want people to hear about that, it's kind of hard.

Another participant stated:

> I think that the subject matter plays a big part in it […] if a guy that sleeps two doors away from you, that sees you every morning and thinks you're a strong person, sees you greetin' [crying] to your boy; that's when it becomes an issue.

Similarly, another participant stated:

> I know umpteen of them that are on the phone like, "Mum, I need money! I need this! I need that!" so that can cause problems [...] That can make other prisoners look weaker than they really are compared to other ones who are self-sufficient [...] You have to be aware of who is round about you when you're talking.

One participant felt that the pressure of this constant surveillance not only impacted upon prisoners' sense of wellbeing but also their relationships with family and friends:

> Everything you do and everything you talk about is, you're constantly, you've got to constantly be aware of your surroundings, and the pressure that it has on you as well can also affect your relationships.

A few participants explained that they felt introducing in-cell telephones in Scottish prisons would offer numerous benefits to prisoners, particularly greater privacy for prisoners during phone conversations which could help negative some of the privacy issues previously discussed and encourage open discussion and bonding. For example, one participant explained that he felt the location of in-cell telephones would offer prisoners an increased sense of privacy in comparison to communal telephones, even if they were still monitored and/or recorded by prison staff:

> It's not just about having access to it, it gives us privacy to speak on the phone […] being able to phone my parents from inside my cell would give the illusion that I'm getting to… that it's just me and my family.

Similarly, another participant opined:

> I think having phones in the cells would be a lot better, you've got that privacy despite the phone being recorded. […] I think people would feel more at home rather than standing out in the hall and just kind of watching what you're saying because people [prisoners] are about.

Another participant described the potential for in-cell telephones to support prisoners' mental health:

> In-cell phones would be amazing. […] That phone in your cell is a portal, that's what it is, a portal to another world. I totally believe that would save lives and I don't just mean people dying, I mean people dying inside.

4.5.4 Distrust

Thirteen participants (54%) described distrust as an issue which can negatively influence the meeting of prisoners' information needs, including issues of trust within the prisoner community, between prisoners and prison staff, and distrust of initiatives run by the prison service for prisoners.

Several participants discussed distrust within the prisoner community, with many commenting on the prevalence of false personas. For example, one participant stated, "Well 90% of people in here are false", and another, "The jail is two-facedness, sweetie-wife [gossiping] and false, to sum it all up", and similarly, another, "People paint a picture of themselves, so you don't really get to know the real person." Several participants described how trust issues made discussing personal topics with other prisoners problematic (given the risk of disclosure). For example, one participant stated:

> See stuff that's personal, I would ask my inner circle. I wouldn't ask anybody else; I would only ask people I actually trust because if I go and ask a random stranger there's a good chance that whatever I say to them in privacy will get blurted out in the hall, and then it will get blurted out in the jail, and then end up all over the news. […] You can't rely on people in here because most of the people in here are backstabbers.

Similarly, another participant explained:

> For life sentences, you're gonna meet a lot of people but you're only going to actually trust so many. […] I think the best-case scenario you're going to get with that is if you've got a good couple of friends […] someone that you trust, but again that's… again that's

> giving yourself out, that's being a wee bit vulnerable because some people are wankers; some people use information, some people tell information without thinking. [...] they don't realise, "You don't repeat what has just been said"; you shouldn't have to say that.

One participant explained that trust issues also influenced interactions with potentially valuable sources of mental health support, such as the Listener service (prisoners trained by the Samaritans to provide emotional support to their peers):

> One of the major problems in prison is the fact of who do you go to that you know will not only keep whatever you say confidential, but are no gonna be construed as being part of the system? Unfortunately, the only place you're really gonna find that is in the actual prison community itself, which is probably why there's Listeners and all that, but again how can you really trust a prisoner to keep his mouth shut?

Trust issues relating to prison officers were also evident in interviews. For example, one participant explained:

> I'm not gonna reveal everything about myself because, although this place breeds paranoia, there's plenty of officers where if they had information about you, they would sell, people would sell the story to a newspaper.

Another participant stated that he did not trust staff to keep information shared in confidence about his mental health private from other prisoners:

> I see the mental health the now. [...] if you walk up to a member of staff [referring to prison officers] and say something, they let it out in the open, they would let people know about it; "Oh, gonnae make sure [prisoner's name removed] is alright?" – "Oh, what's wrong?" – "Oh, he's feeling a bit low and no well", and then they come to your door like, "What's wrong with you?" – "What are you talking about? What's wrong?" – "Oh, he just told me this and that", when they shouldn't be doing that.

One participant stated that he felt prison officers would share information about prisoners to breed distrust within the prisoner community:

> There's a guy that just got moved off our flat there the now and he was making out as if he wasn't allowed to be back on the flat […] once he left, the screws turned round and said, "Nah, he asked for the move", but they shouldn't be doing that [...] It's screws versus cons at the end of the day. It doesn't matter what they say. They might turn around and say it's not like that anymore, but it is.

Another participant felt that this distrust was reciprocal, with prison staff (including civilian staff) equally distrustful of prisoners:

> You want to find something out and it could be trivial but you're like, "I don't want to ask them because they're gonna ask why I want to know that." [...] if they asked why and you said, "I just want to know", I think they'd be sceptical because they'd think, "Well why is he wanting to know these things? Is there a hidden agenda here?" I know for a fact that they're trained to spot hidden agendas in trivial matters which does put boundaries up.

One participant explained that prisoners' general distrust of others in the prison also extended to initiatives run by the prison service for prisoners, due to questions about the motives behind these:

> I think the most difficult thing is trying to find a way that's gonna allow people to trust individuals to come in that are gonna help them to open up, so it is, and that's what the major barrier is; trust. […] there are seldom any good experiences in here, especially with staff. And you can, it's understandable that guys in here will probably hate the system more than they'll appreciate it […] and anything good that the SPS in particular try to do will be looked at with disdain. […] there's a lot of concern about projects that are done, especially run by the SPS; is it a feel-good factor for them, or is it an actual genuine positive beneficial project for us?

4.5.5 Low self-esteem

Thirteen participants (54%) discussed low self-esteem as an issue which can negatively influence meeting of prisoners' information needs, including general feelings of low self-esteem among the prison population and the guilt associated with prisoners' dependency on others.

Several participants described how low self-esteem could stem from feelings of low self-worth. For example, one participant stated, "I think a lot of prison is like that; everything is swept under the carpet. […] If it looks bad for them, they don't want to know [...] I've no got any sense of value." Another participant, who was imprisoned for murder, described how negative representations of prisoners in the media negatively affected his self-esteem:

> People who read the papers see the sensationalist headlines about how criminals in general are 'animals', they're 'monsters' [...] it's so easy to forget the fact that we are human beings. [...] If I was to go on an emotional level, which is something I don't do very often… it's, it is, it's painful to see and hear.

Also evident in interview discussions were the feelings of guilt associated with prisoners' dependence on prison staff for information. For example, discussing prison officers, one participant stated, "If you

go to a personal officer with a problem, he won't come back and say, 'I found this out' or 'I found that out'; you need to go back again and ask but it makes you look like a pest, doesn't it?" Similarly, another participant stated:

> This is my first time in Shotts so when I was going to the staff, it felt as if I was just asking and asking and asking for stuff. […] I was being a pest and that's what they think, you can see it in them, but the stuff that I'm asking for is what I need, and I can only go to them for it.

Discussing feelings of guilt associated with dependency on teaching staff, one participant stated:

> Here in education, I feel like I'm asking for, even if I'm just asking for pictures and that, I feel like I'm asking all the time. [...] Sometimes because I've asked that much, if I do need something, I'll no ask them for a couple of days, and even if I need it there and then, I'll just wait because of that.

Similarly, another participant stated, "I appreciate them helping out when I need it, but I do feel bad when I have to ask sometimes because I do feel like I'm repeatedly asking sometimes, and it seems to be the same stuff." One participant explained that he felt reluctant to approach teachers to remind them of his request for the legal texts available to prisoners in the library to be updated; "I don't want to become a pest, you know, annoying people asking, 'What's happening with the legal books?'"

Participants also discussed feelings of guilt relating to family which could negatively influence interactions with this potentially valuable source of information and support. For example, one participant explained, "After [detail removed] years in jail, you feel a burden to your family", and another, "Sometimes I feel like an inconvenience, fucking bothering people out there [referring to family], phoning them up for shit and all that." Similarly, another participant stated:

> People were buying me books and it was too dear for what I was only needing like, my cousin went and bought me a book at £70 and I only needed the one chapter out of it [...] I don't want to be a burden to anybody and I certainly don't want to… but because it was for education, they were all, "Let's go".

And another:

> It wouldn't be so bad if [...] If it was just me that was being punished, but it isn't, they are suffering as well and the only thing that I can do is, once or twice a week, a weekly, two-weekly phone call is going, "Hey mum. Hey dad. How's things?" and just keep it as normal as I can, so that they… I mean, they don't need a reminder that I'm in here.

And another:

> It's like, you can have down days and things like that anyway but, and if I do, I do, I deal with it and I'll talk to somebody in here about it, but I won't necessarily talk to my family about it because that will have them worried when they don't need to worry.

In response to such feelings of guilt, one participant explained that he often pretended to be happy at visits (despite this not being the case) due to a desire not to burden family with his problems:

> And then when you go down to the visits, even if your head is bursting, when you're walking in the last thing you want is to put the onus on your family, so you just bounce in with the visit head on like that, "Happy, happy! How we doing?"

4.5.6 Family contact via visits

Eleven participants (46%) described issues relating to contact with their family at visits which made it difficult for them to address needs via this potentially valuable source of information and support.

Several participants explained that the distance prisoners' families lived from the prison could make the journey to the prison for visits difficult and expensive. For example, one participant explained:

> No everybody's got the means and the funds […] There's one boy on my landing who's from [England] and his missus gets the bus up, and she comes up twice a week […] it must be some struggle […] I couldn't ask her to do that.

Another participant explained that visits were often "costly and difficult to arrange" because his family lived in England and had to stay overnight when visiting him. Another participant, whose parents lived in Scotland but several hours away from the prison by car, explained, "I mean, my parents we haven't physically seen each other in over two years. […] at the time, they had got my cousin to drive them up and he's no really readily available." Further highlighting visit transport issues, one participant stated:

> I've got the wanes up every other week [...] it can be a pain in the arse sometimes for them getting up. I was saying to my pal there the other week, "Want to bring the boys up?" so I just try about to see if I can get someone.

Some participants opined that visiting times were too short to maintain relationships with family. For example, one participant felt he did not get enough time to bond with his son during father-child visits:

> I see him two hours a week in the father-child visits which is a good visit; you can move about, you can play-fight, you can play football, that's no my issue. My issue is the two hours a week; it takes me three months to accumulate 24 hours. So, every three months I get the equivalent of a full day with my boy which over a year is like, well really, I only see my boy four days a year. […] It's difficult, just trying to condense all the information

> that you pick up in life and channel it to him in four days' worth. […] My biggest fear is that I know my son loves me to bits, you can totally feel it, but is he growing up… without having any of me in him?

Another participant explained that he felt the duration of normal visits could be too short to justify family travelling all the way to the prison:

> The SPS are just hypocrites when it comes to a lot of the stuff that they say and they preach… they talk about rehabilitation […] I mean, visits are like what, 45 minutes? So that's 45 minutes for someone to travel all the way up there to then have to go back just like that. How's that rehabilitation? How's that encouraging families?

The lack of privacy at visits also appeared to negatively influence interactions with family. For example, one participant described visits as "noisy, loud, not very private, not very confidential". Another participant stated that he felt 'bonding visits' (a special type of visit earned by prisoners by demonstrating trustworthiness to staff) should be allowed to take place in a private room:

> Well, a bonding visit is like a, kind of a wee bit of a privilege if you know what I mean? You need to behave so if they're looking into your background and they can see that you're behaving, no had reports, no taking drugs […] I think that they should bring in a scheme like a, like they're trusted so put them into a room where there's no prison officers. [...] when you go in, you want to cuddle, kiss your wane, play, and if you're with your wane's mum or girlfriend or whatever, they don't feel as comfortable as what they should be.

A couple of participants felt that introducing technology (or increasing where already available) in Scottish prisons for remotely contacting family (e.g. Skype or Facetime) could help mitigate some of these issues. For example, one participant stated:

> They [referring to SPS] keep going on about family contact and all that, but we live in a society now where you don't need to leave your house to do your shopping or anything like that, so they could have it that you don't need to leave your house to go to a prison visit. [...] [Skype] would give guys who've no got the funds, the different things; the car or a lift, that have to get buses; it would give them a lot more, it would put them at a lot more ease, see if you could see somebody's face and you're like that, "Oh they look alright, they're doing alright" because it's different if you're just hearing it [on the phone]. If you're just hearing it, they could tell you anything.

Another participant similarly suggested the introduction of such technology, recommending:

> Facetime or something like that. [...] Because there's people that cannae get visits or that and if there, well there's some boys that have been sent up to [HMP] Grampian and all that and they're from down here [...] Luckily the ones that I know haven't got wanes or that, but it would be a bit of a pain in the arse if I got sent up there with three wanes.

4.5.7 Drug-induced states

Ten participants (42%) discussed drug abuse (often engaged in as a way of 'escaping' problems) as an issue which can negatively influence the meeting of prisoners' information needs. For example, one participant explained, "Escapism; that's how people take drugs, why the majority of people take drugs", and another, "Guys take drugs, like they say, to escape this place. […] It's the only way they can cope." One participant offered some of the reasons why he thought some prisoners abused drugs:

> I would say when you first come into prison, you know you're taken off the street, it's probably trauma with a lot of them, you know, depending on the crime they've committed. […] it's just a case of if they're mad with it [high on drugs], they don't need to deal with the situation that they're in. […] it's not a good coping mechanism.

Discussing the drawbacks of abusing drugs to escape problems, one participant commented, "If, for instance, there was somebody comes in and they only way they can cope is by getting high [...] it's gonna cause you more problems than what you've been going through in the first place." Adding further insight, another participant explained that drug abuse offered a distraction from the monotony of prison life but could lead to addiction issues in the long-term:

> I'm no saying the jail is easy […] it's no the physicality or that, it's just the daily grind, day in, and I don't care what anybody says; sooner or later, after long enough, everyone will hit a wall and outside you've got ways to distract yourself but in here you're limited; read books, watch a box set, go to the gym; that's all great but you're doing the same thing so sooner or later, someone comes along to you and says, "You want to feel good for a day?" and you're like that, "Why not, man?" […] that wanting to feel good ends up becoming a need; "I need to not feel bad."

Similarly, another participant commented:

> Some people think to themselves, "If I go and take drugs then my problems will go away" but it's no true; they're still going to be there, it's just it might help them forget about them [...] For example, if the problem is that they've fallen out with their girlfriend […] they're taking drugs for months trying to get over it and by the time maybe they're over their break up, they've got a drug problem, so it's like another problem after the problem.

Some participants also felt that drug abuse could lead to prisoners not exploiting potentially valuable sources of information and support. For example, one participant stated that prisoners might not participate in relevant support programmes due to their drug-induced state:

> There is a number of events that take place within Shotts, usually around various forms of mental health. The problem is it's the same guys that go to these things that actually want to be involved in projects, who actually don't have, who actually are not afflicted by any mental health [issues]… but trying to get the guys who are possibly suffering from mental health disorders… they're high as a kite so they actually have no interest whatsoever.

Another participant felt that drug abuse could also lead to prisoners refusing visits from family:

> I know a lot of guys in here that do drugs and they cannae tell their family. […] they think their family will notice it, see it in their face […] so they'll go maybe months and months without visits and that.

One participant stated that he felt the psychological damage caused by long-term drug abuse could leave prisoners unable to recognise and/or understand their information needs, consequently leaving them unable to articulate these to others:

> Some people, you can tell that this isn't the right place for them but then at the same time, they don't really know that either, their mind is gone. […] I mean they're not going to ask the right questions, they're not gonna ask for help. [...] I think it could be not understanding their needs [...] they need to get information, but they blatantly might not know that.

4.5.8 Isolation during lock up

Five participants (21%) discussed how being isolated and locked in cells, particularly at night, restricts prisoners' access to information thereby negatively influencing the meeting of their information needs. For example, one participant stated, "It's frustrating. I mean, you're locked in there and if you want to find something out, you've no really got a chance of finding it out. [...] You need to wait until the morning to go on the phone or something." Similarly, another participant questioned, "Well when you're locked up, there's nothing you can do, unless you've got a book in your cell, but even at that, that's only limited information, isn't it?"

Some participants described how being alone during lock up times could lead to prisoners overthinking; potentially triggering recognition of information needs which could not be immediately addressed. For example, one participant explained:

> When you're locked up, and you're no say, watching the telly for example, there's hundreds of things you want to find out and you cannae [...] I think it's because like, well see when you're on your own, and like, you probably know yourself, when you're on your own you overthink things and that, don't you?

Similarly, another participant commented, "It's quiet at night-time and that as well, so that probably is when you find yourself thinking just about stuff. […] You just do your thinking because everything's stopped."

Watching television was recognised by some participants as offering a useful distraction from negative thoughts during the isolation of lock up times. For example, one participant explained:

> Everyone has their coping mechanisms and with the telly, it's a distraction I suppose. […] because like with telly, I can watch some awful rubbish that I don't enjoy, but is that because there's nothing to do or is that because I'm avoiding something? I don't know.

Another participant explained that he felt that not having a television for distraction during lock up could be particularly difficult for prisoners with mental health issues:

> If you're in your cell without your telly and you have got mental health problems, that's the worst thing. [...] You're on your own with your thoughts, without a telly. Maybe a radio, some people… don't get me wrong, I've done it. I can do it. […] I was just bored but if somebody had mental health problems, I think it would be horrible. Think about it, guys have got mental health problems and they're thinking mad things, so see without a telly, I think it would be even worse because you need things to distract you.

4.5.9 Risk to sentence progression

Four participants (17%) described the risk of prisoners' progression being negatively influenced as a result of revealing certain information needs to prison staff as an issue which could negatively influence the meeting of their needs. For example, one participant stated, "If you've got mental health issues, that could potentially hold you back", while another explained that it was "difficult" to talk to prison officers about suicidal thoughts:

> If you get suicidal thoughts and tell that to an officer, you automatically get penalised by being put under surveillance, getting a mark on your file, you possibly don't qualify for open prison, and that obviously then also affects your ability to progress within the system.

One participant explained that having nightmares about their crime was viewed as "a taboo subject" by prisoners because telling staff could mean being assigned additional rehabilitation courses:

> If he's already been generically assessed stating, "I don't think about it [my criminal behaviour] that much. I try to keep it away. It's a different part of my life", and then he needs to go and say, "I'm fucking having nightmares", then they're gonna come back and say, "Well, you need to do a violence course then."

Another participant explained that attending drug addiction support meetings could also negatively influence prisoners' progression, contributing to a reluctance amongst prisoners to attend these which could leave them unable to access this potentially valuable source of information and support:

> There's a thing in here called 'Cocaine Anonymous' so if you're wanting to talk about drug addictions and that […] even if you're just there supporting somebody, it turns up on your file. […] that could scare guys off, they could end up having to do another programme which could hold them back even longer again.

4.5.10 Misinformation and disinformation

Four participants (17%) described misinformation and disinformation in the prisoner information network as an issue which can negatively influence the meeting of prisoners' information needs. Participants frequently discussed how misinformation and disinformation was common due to the way in which information changed as it was passed from one prisoner to another. For example, one participant stated, "It's like Chinese whispers; one guy says something and then stuff gets added on after him and so on", and similarly, another explained:

> Sometimes it can be like Chinese whispers in here […] I mean, something can happen in one hall, for instance, and by the time it gets to another hall [...] details have been embellished to make it sound more extravagant or more sensational than it actually really was. [...] in some cases it may be people just trying to stir things up because they want something to happen, most likely to change the monotony of prison life.

Another prisoner similarly commented on the potential for boredom to contribute to the prevalence of misinformation and disinformation in the prisoner information network:

> Just say there was a fight in one hall and you know what happened, by the time it's been dinner and exercise, it's went from being a fight to a stabbing to all sorts [...] Everybody likes to add their own wee bit on to a story in here. [...] It probably is down to boredom.

Similarly, another stated, "It's like fake news all over the place [...] people like to cause disruption."

4.5.11 Overview of issues

In summary, findings of this study highlight a range of issues which influence the meeting of prisoners' information needs. Analysis of interviews identified a range of key issues, including the lack of internet access which left prisoners dependant on staff to access information from this source, fear of stigma which left prisoners reluctant to seek information on sensitive topics, and telephone access and privacy issues which restricted prisoners' ability to communicate with outside sources. Also evident were issues relating to distrust of others (including prisoners, prison staff, and general distrust of the prison system) and feelings of low self-esteem stemming dependency on family and prison staff which left some prisoners reluctant to seek information from these potentially valuable sources. Further issues, discussed by fewer participants but clearly significant for those who did discuss, related to problems maintaining contact with family via visits which could restrict prisoners' ability to seek information from this potentially valuable source of information and support, drug-induced states which could leave prisoners unaware of and/or unwilling to articulate information needs to others, and isolation during lock up times which restricted access to sources of information. Also evident were issues relating to the potential risk to sentence progression could leave prisoners reluctant to reveal mental health needs and/or attend addiction support programmes, and the prevalence of misinformation and disinformation in the prisoner network which could complicate attempts to seek information while also perpetuating issues of distrust.

4.6 Chapter summary

This chapter presents findings of this study drawn from interviews with 24 prisoners (including participant demographic details). Findings evidence a range of information needs on topics such as mental health, relationships, the prison regime, education, rehabilitation, reintegration, physical health, the law, and recreational interests. Also evidenced are a range of information sources, including other prisoners, prison officers, healthcare professionals, family, teachers, forms of media (i.e. television, radio, newspapers, and magazines), solicitors, learning centre resources (i.e. legal texts, encyclopaedia software, and library books), friends (outside of the prison), printed prison resources (i.e. posters and the prison induction booklet), social workers, Listeners (prisoners trained by the Samaritans to provide emotional support to their peers), the prison chaplain, the prison librarian, addiction support services, and physical training instructors. Evidence suggests a range of factors influencing prisoners' use of information sources, including the perceived appropriateness or relevance of sources to the topic of the information need (e.g. seeking educational information from teachers) and the value attributed to sources with certain characteristics (e.g. lived experience and

trustworthiness). Also evidenced are a range of issues which can influence the meeting of prisoners' information needs, including prisoners' lack of internet access, the risk of stigma associated with revealing certain information needs, telephone access and privacy issues, distrust of others in the prison context, low self-esteem stemming from a dependence on others, problems maintaining contact with family via visits, drug-induced states inhibiting awareness of needs and access to sources, isolation during lock up restricting access to sources, risks to prisoners' progression associated with revealing certain information needs, and the prevalence of misinformation and disinformation in the prisoner community. In the next chapter, findings are discussed in-depth to identify what this study found, whether this supports existing work and/or contributes to novel understanding, and the implications of this for the LIS field.

Chapter 5: Discussion

5.1 Introduction

This chapter presents a discussion of findings, structured by the study's research questions (see chapter 1) and supported by demographic data and selective use of empirical data from chapter 4. Key themes which emerged from analysis of data are identified and discussed to build upon the current level of understanding regarding prisoners' information behaviours, and a comparison of this study's findings to those of existing studies is presented to highlight the novel contribution made by this study and areas where this study supports and/or builds upon findings of previous work. First, the information needs of prisoners evident in findings are discussed *(section 5.2*), then sources of information available to prisoners and factors influencing their use (*section 5.3*), followed by issues which can have a negative influence on the meeting of prisoners' information needs (*section 5.4*).

5.2 What are the information needs of prisoners?

Findings of this study evidence a range of prisoners' information needs. Analysis of interview data identified a range of information needs, including those relating to themes such as mental health (e.g. sub-themes including mental illness, emotions, and suicidal ideation), relationships (e.g. maintaining bonds with family and establishing relationships with other prisoners), the prison regime (e.g. ordering personal items), education (e.g. researching topics to complete coursework), and rehabilitation (e.g. progression dates and mandatory courses). Also evident were information needs relating to prisoners' reintegration following release from prison (e.g. seeking employment and accommodation post-release), physical health (e.g. medicines and injuries), the law (e.g. preparing for appeals), and recreational interests (i.e. keeping up to date with sport and new movie/music releases).

Table 4, on the following page, presents an overview of the current level of empirical research on the information needs of prisoners, including details of samples and methods (where provided). The level of evidence to support findings (i.e. identified needs) in each study is specified under three headings; empirical evidence provided, limited empirical evidence (e.g. summary reporting of qualitative evidence and/or statistical data), and no empirical evidence provided.

Table 4 *Information needs: comparison of findings to existing empirical studies*

		Current Study	Canning and Buchanan 2019	Sambo *et al.* 2017	Emasealu and Popoola 2016	Bajić 2015	Tarzaan *et al.* 2015	Rafedzi and Abrizah 2014	Eze 2014	Nacro 2009	Omagbemi and Odunewu 2008	Chatman 1999
Prisoner sample	Includes adults	√	√	ns	√	√	ns	X	ns	√	√	√
	Includes males	√	√	√	√	√	ns	√	ns	X	ns	X
Method	Qualitative	√	√	X	X	X	X	√	√	√	X	√
	Quantitative	X	X	√	√	√	√	X	√	X	√	X
Information needs	Physical health											
	Legal											
	Education											
	Recreational											
	Prison regime											
	Mental health											
	Reintegration											
	Relationships											
	Rehabilitation											

Key	ns	not specified		empirical evidence provided		limited empirical evidence provided		no empirical evidence provided

Table 4 highlights the current lack of research into the information needs of prisoners; particularly adult males with whom this study is concerned. For example, of the few studies which include this group in their sample, only one presents qualitative data to evidence findings (i.e. Canning and Buchanan, 2019) and two are quantitative studies that provide limited statistical data which offers little depth of insight into prisoners' information needs (i.e. Bajić, 2015; Emasealu and Popoola, 2016). Several studies fail to specify important details of their sample (i.e. Eze, 2014; Omagbemi and Odunewu, 2008; Sambo *et al.*, 2017; Tarzaan *et al.*, 2015), while others which present qualitative data to evidence findings have focused on female prisoners (i.e. Chatman, 1999; Nacro, 2009) or juvenile prisoners (i.e. Rafedzi and Abrizah, 2014). With adult male prisoners accounting for 93% of the prison population in Scotland (Carnie and Broderick, 2019, p. 2), and a similar age/sex ratio reported in the majority of countries worldwide (World Prison Brief, 2021), the research deficit regarding this group is troubling. (In a review of related work in chapter 2 of the thesis, Stevens' (1994) paper on the

information needs of prisoners was discussed but despite the title, this work does not identify any specific categories of need and is therefore not included in this table).

This study's findings regarding prisoners' information needs appear largely in line with those of previous studies; supporting assertions that prisoners have information needs similar to those of the general public (i.e. Eze, 2014; Rafedzi and Abrizah, 2014; Sambo *et al.,* 2017; Tarzaan *et al.,* 2015), and providing substantial empirical evidence to support arguments that prisoners also experience specific coping and emotional needs as a result of their imprisonment (i.e. Canning and Buchanan, 2019; Chatman, 1999; Emasealu and Popoola, 2016; Nacro, 2009). Findings suggest a correlation between prisoners' information needs and the stage they are at in their sentence; for example, information needs relating to the prison regime appeared common at the beginning of a prison sentence as part of prisoners' initial adaptation to prison life, and needs relating to reintegration often appeared to be associated with the end of prisoners' sentences as part of prisoners' preparation for release; providing much needed evidence of such correlations as only previously noted by Canning and Buchanan (2019) who found that incorrect assumptions about needs based on sentence stages could inhibit access to information. Findings also present much needed evidence of information needs previously not well evidenced (i.e. relating to relationships and rehabilitation), thereby offering valuable further insight into such needs. Findings also indicate that prisoners' information needs are often unmet, providing valuable additional evidence to support claims that prisoners often live in information-impoverished circumstances (i.e. Canning and Buchanan, 2019; Chatman, 1999), and build upon the understanding in this area by offering much needed further insight into factors which make certain needs difficult for prisoners to address.

In the following sections, discussion focuses on three key themes which emerged from analysis of findings regarding the information needs of prisoners, categorised as sensitive information needs in the prison context, the complexity of prisoners' information needs, and the impact of unmet information needs in the prison context.

5.2.1 Sensitive information needs in the prison context

Findings of this study present evidence of sensitive information needs in the prison context and offer insight into factors which contribute to the sensitivity of needs and the self-protective behaviours which prisoners adopt in response to risks associated with revealing and/or acting on these.

Findings suggest that information needs relating to mental health, relationships, and learning issues are difficult to reveal and/or address in the male prisoner context and this is suggested by participants' language when discussing these topics. For example, mental health was described as "taboo", "embarrassing" and "a very, very difficult subject", relationships were described as "taboo",

"embarrassing", and "a dodgy subject", and functional literacy issues were viewed as a "vulnerability" which people would often "hide". It is acknowledged that the topic of mental health, in particular, may be inherently sensitive and studies of mental health and masculinity in the non-prisoner context suggest that this is particularly true for men who often appear more reluctant than women to seek help for issues relating to mental health (Cleary, 2012; Emslie *et al.*, 2006; Farrimond, 2011; Galdas *et al.*, 2005; Oliffe and Philips, 2008). Previous research by Canning and Buchanan (2019) presents evidence (albeit limited) which suggests that information needs relating to emotional topics and coping with imprisonment are sensitive in the prison context and are often unmet. Findings of this study provide much needed further evidence and depth of insight in this area by presenting evidence of sensitive information needs relating to not only mental health and relationships, but also sensitive needs on other topics which appear to be associated with weakness (not solely emotional but cognitive deficits relating as functional illiteracy), demonstrating how the sensitivity of such topics are further intensified in the male prisoner context. This is discussed in further detail below.

One key theme found to arise frequently in discussions around sensitive topics was that of weakness. For example, participants of this study often expressed a reluctance to reveal needs relating to topics such as mental health, relationships, and learning issues for fear of showing weakness:

> Mental health is probably one that, probably actually one of the biggest things in here that guys generally won't talk about. […] It's actually that we as prisoners, as men in a prison it's… we try not to show any weakness.
>
> […] if you love somebody and you split up with them, you're obviously gonna be upset, that's natural, but they [prisoners] think to themselves, "I cannae show that in here. If I show that, I'm gonna be showing weakness".
>
> When I was a peer tutor and I was learning boys how to read and write […] the hardest thing was them admitting they couldn't read and write in the first place [...] because weakness is a thing you cannae show in here.

Hypermasculine environments such as all-male prisons are recognised as inhibiting the expression of 'feminine' emotions which suggest weakness such as distress, dependency, and love (Courtenay and Sabo, 2001; Crewe, 2012; Goffman, 1963; Holmberg, 2007; Kupers, 2001; Messerschmidt, 2018; Mosher and Tomkins, 1988). In their study of prisoners' help seeking for mental health issues, Skogstad *et al.* (2006) found that the male prisoner culture "continues to reinforce traditional male-role stereotypical behaviors and inmates reported feeling pressured to conform to these social norms, including the ways to cope with emotional distress" (p. 17). Offering insight into how social norms influence prisoners' behaviour, Bondeson (1989) explains that one of the most important norms in

male prisoner culture entails "remaining unaffected" (p. 80). Findings of this study suggest that prisoners learn how to respond to and cope with information needs in a manner that is in line with masculine social norms by observing behaviour of other prisoners and that, in the case of sensitive needs which are associated with weakness, this is often through repression/suppression of such needs via self-protective behaviours (discussed in more detail later in this section); evidencing the influence of activating mechanisms and linking to concepts in the nested theories of 'social learning' and 'stress/coping' presented in Wilson's (1997) Revised General Model of Information Behaviour.

Also evident in findings is a range of risk factors which contribute to the sensitivity of information needs, particularly the risk of stigma associated with revealing and/or acting upon information needs which do not conform to social norms of the prison context (the concept of risk is discussed in section 2.3 of the thesis). For example, one participant explained that prisoners might be reluctant to reveal mental health issues for fear that "other people would laugh at them", while another stated that he could understand why prisoners might be reluctant to show distress as a result of relationship issues because he had seen "people taking the piss out of a guy because he's split up with his girlfriend and he's upset", and another commented that he felt prisoners might hide functional literacy (i.e. reading and writing) issues for fear that others would "belittle" them. Campbell (2005) states that, given the environmental and cultural restrictions on action and expression in the prison context, prisoners deal with a range of risks which are often not financial or time-orientated, but rather, threaten their psychological and/or physical wellbeing (p. 20). Chatman (1999) explains that the small world of the prison has a negative influence on prisoners' information seeking because social norms "shape and define what problems are appropriate to pursue and acceptable for public disclosure" (p. 204). In line with these statements, findings of this study present valuable further evidence of the influence of social norms and risks avoiding from deviating from these (e.g. stigma) in the prison context and offer important insight in relation to specific sensitive information needs (relating to mental health, relationships, and learning issues).

This is also evidence of risks to prisoners' sentence progression (e.g. the risk of spending longer in prison) which may contribute to the sensitivity of information needs relating to mental health. For example, one participant explained that revealing mental health issues to prison staff could mean being assigned additional rehabilitation courses which could potentially extend prisoners' sentences; "I mean, it's good to get help […] but in here, all of a sudden if you've got mental health issues, that could potentially hold you back", while another explained that it was "difficult" to talk to prison officers about suicidal thoughts because "If you get suicidal thoughts and tell that to an officer […] you possibly don't qualify for open prison, and that obviously then also affects your ability to progress within the system." Findings therefore support previous assertions that refraining from revealing

vulnerabilities to others not only helps male prisoners to avoid stigma and/or bullying from other prisoners, but also plays an important role in securing their progress through the prison system (Kupers, 2001). Discussions of risk in relation to sensitive information needs were common and findings present substantial evidence of prisoners engaging in risk/reward evaluations which influence their motivation to act upon information needs, linking to the nested theory of 'risk/reward' in Wilson's (1997) Revised General Model of Information Behaviour and offering valuable further evidence of the influence of activating mechanisms in the prison context.

Participants' discussions also offer insight into prisoners' strategies for coping with sensitive information needs, including the ways in which such needs are carefully articulated to others within the prison context. It was noted that prisoners often appeared to discuss topics such as mental health with each other in an indirect manner. For example, one participant explained, "The one word that explains every situation in prison and to all prisoners is 'jail' […] and that word 'jail' answers a lot of things; depression, anxiety, just the way you are." Findings suggest that prisoners may engage in this indirect discussion to mitigate against the risks associated with deviating from social norms by revealing needs relating to weakness to others. For example, one participant explained that, as opposed to discussing his needs openly, he had to seek information on coping with emotional issues:

> […] without saying words like 'emotions' or anything like that […] I had to articulate the conversation without making him [the other prisoner] feel weak. […] There's only one thing that people respect in here and that's strength, and you only gain that through violence […] you need to watch who you talk to or how you talk.

Here, there is evidence of a prisoner who recognises his need for information on coping with emotional issues but acknowledges the need to carefully articulate this to others. Drawing on concepts from Taylor's (1968) question-negotiation theory, by 'compromising' the need (i.e. avoiding terms which could indicate weakness) and expressing it in a form acceptable to the 'system' (i.e. other prisoner who may hold valuable information), findings demonstrate how prisoners can act upon sensitive information needs while also mitigating against associated risks of stigma and/or violence.

Where risks associated with sensitive information needs are considered too high to even engage in non-direct discussion with others, findings suggest that prisoners adopt self-protective measures to guard against the risks of disclosure. For example, one participant explained that mental health was "one of the biggest things in here that guys generally won't talk about", while another explained that relationship problems were something many prisoners "just won't speak about". This demonstrates evidence of *secrecy*, a self-protective behaviour which Chatman (1996) describes as withholding one's true state of affairs by guarding against disclosure (p. 195). Also evident was prisoners engaging in

deception, which Chatman (1996) describes as hiding one's true condition by giving false or misleading information to protect against the potential risk of disclosing personal information to others (p. 196). For example, several participants commented on the "culture of wearing masks" within the prisoner community and the tendency for prisoners to wear "a brave mask" or to have "a mask on acting all happy" despite this not being their true emotional state. One participant explained that prisoners with functional literacy issues would "put up a wall, they'd rather fight you, make up a completely different reason than say, 'It's because I cannae write'" also demonstrating deception in response to learning issues. Findings therefore offer valuable evidence and insight into self-protective behaviours adopted by prisoners in response to the risks associated with revealing sensitive information needs, behaviours which are importantly noted as being liable to result in needs remaining unaddressed.

In summary, findings of this study suggest that the sensitivity of information needs relating to mental health, relationships, and learning issues is heightened in the prison context, and this is partially attributed to the risk of stigma associated with deviating from masculine social norms but also the risk of prisoners' sentences being extended by revealing sensitive needs to staff, building upon findings of previous related work by Canning and Buchanan (2019). Findings suggest that, in response to risks, prisoners weigh up the benefits of seeking to address such needs against the risks associated with doing so with the typical outcome of such risk-reward evaluations often resulting in inaction, offering insight into the reasons why such needs appear to be often unmet. Findings of this study can be mapped to Wilson's (1997) Revised General Model of Information Behaviour; i.e. the information need is sensitive (context of the need), prisoners employ coping strategies (such as suppression) in response to sensitive needs which trigger stress (stress/coping), prisoners weigh up benefits of acting on sensitive needs against potential risks (risk/reward), and prisoners determine how to respond to sensitive needs in line with masculine social norms by observing behaviour of other prisoners (social learning). Findings can also be mapped to Taylor's (1968) question-negotiation theory, with evidence suggesting that prisoners engage in indirect discussion of sensitive needs with other prisoners to mitigate against the social risks associated with more direct discussion (e.g. stigma and/or violence), demonstrating the 'compromising' of needs to a 'system' or other individual. Furthermore, findings also evidence concepts presented in Chatman's (1996; 1999) information poverty and small world theories, with evidence suggesting that prisoners engage in self-protective behaviours such as *secrecy* and *deception* (key indicators of information poverty) when risks are considered to outweigh the benefits of seeking to address sensitive information needs.

5.2.2 The complexity of prisoners' information needs

Findings of this study also offer valuable insight into the complexity of prisoners' information needs. For example, findings suggest the potential for many-to-many relationships between different categories of information need, with evidence of interwoven needs which may form part of a larger goal (e.g. preparation for release). As illustrated in Figure 10 below, information needs relating to prisoners' reintegration into society following release from prison were found to be interwoven with needs relating to rehabilitation, relationships, law, mental health, and education; some of which were also found to be interrelated (i.e. mental health and relationships).

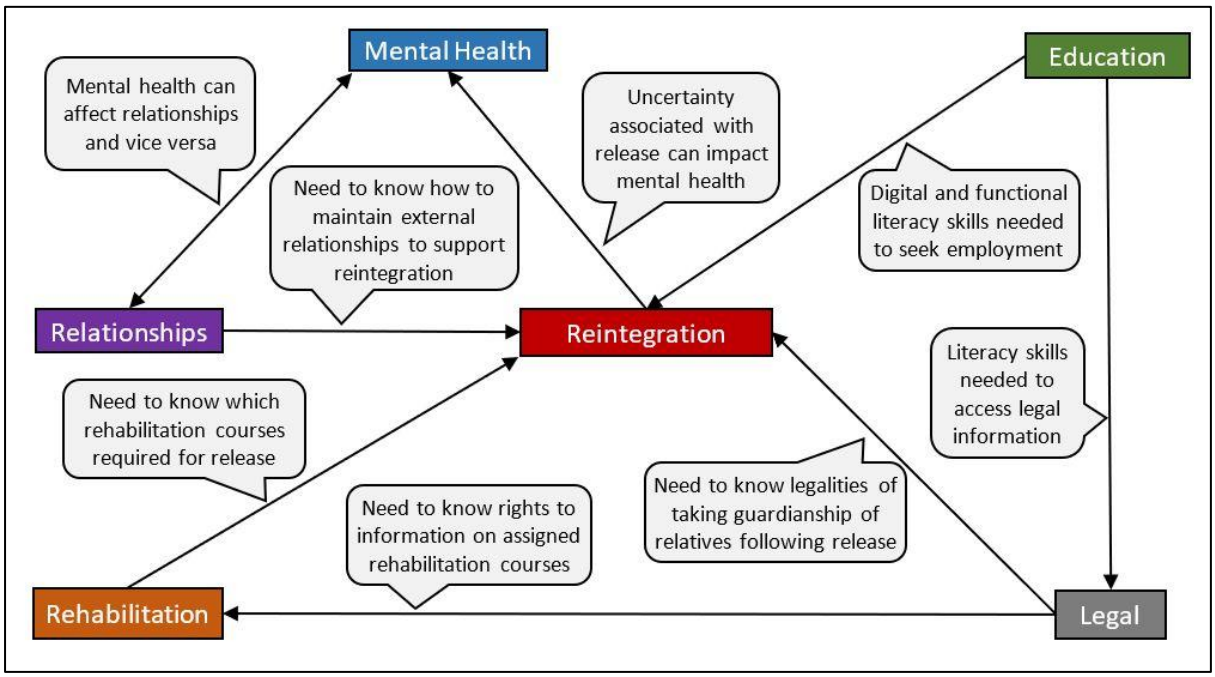

Figure 10 Example of many-to-many relationships between information needs

Clear in participant's discussions was the potential for complex interrelated needs to overwhelm prisoners and even trigger additional needs. For example, one participant described how his mental health suffered as a result of uncertainties relating to seeking accommodation and managing finances following release his from prison; "It gets me stressed out, depressed; that just all builds up and builds up and that's why I've started talking to mental health [staff] because if I just keep letting that build up, I'll end up exploding". Similar evidence is presented in Buchanan and Jardine's (2020) study of the information needs of socioeconomically disadvantaged young first-time mothers, in which one participant explained that she had "panic attacks" as a result of complex interwoven needs relating to motherhood (p. 1147). While Canning and Buchanan's (2019) study of prisoners' information behaviour found similar evidence of "legal, financial, housing and employment needs in relation to future release, many interwoven, and many unmet" (p. 422), little insight is presented as to why such

needs were often unmet. Findings of this study present much needed further evidence and insight into the potential for the stress and uncertainty associated with complex interrelated needs to trigger and/or exacerbate existing negative emotional states, which can not only have a negative impact on prisoners' mental health but also hinder their rehabilitation (Day, 2009). Preferred strategies for coping with feelings of stress (e.g. the tendency to avoid problems as opposed to attending to them) are acknowledged as having the potential to influence an individual's motivation to seek information (Case and Given, 2006; Kuhlthau, 1991, Wilson, 1997), and findings of this study offer valuable evidence and insight into how the uncertainty and stress associated with complex information needs may be one reason why such needs are reported as often unmet.

Further highlighting the complexity of prisoners' information needs, findings also suggest the potential for recognition of information needs to trigger recognition of related needs which must first be resolved. For example, one participant explained that he had to get "a lawyer involved" before he was able to obtain information on his assigned rehabilitation course, suggesting a related need for information on his legal rights. However, solicitors were reportedly difficult to access and it was noted that there are "a lot of prisoners that can't read and write" who might struggle to access information in legal texts. Findings therefore demonstrate the potential for recognition of an information need on one topic (i.e. rehabilitation) to trigger recognition of related needs on other topics (i.e. the law and education) which must first be addressed. This example scenarios is illustrated in Figure 11 below.

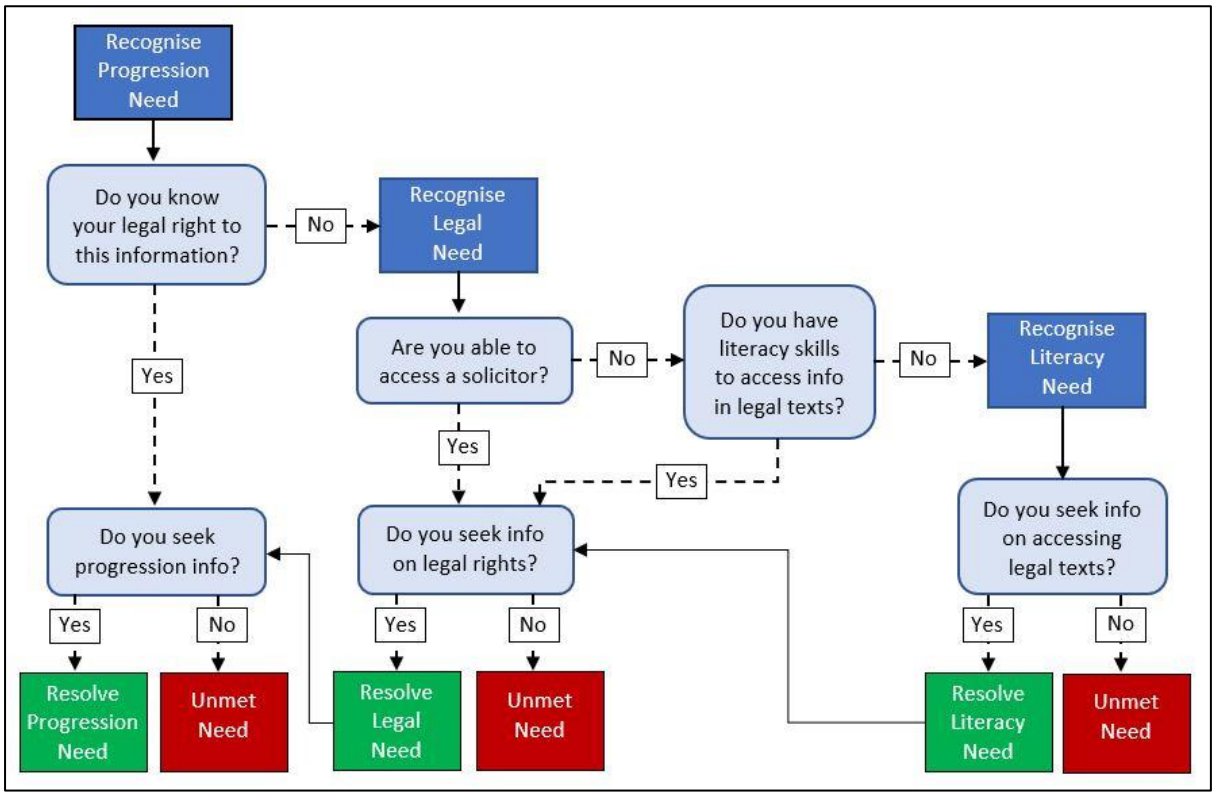

Figure 11 Example of relationships linking multiple related information needs

Offering insight into how this may influence prisoners' ability and/or willingness to address needs, Case (2002) explains that in recognising an information need, individuals may also become aware of other related needs which must first be addressed, and if this task is perceived as too arduous, individuals may choose to leave the initial need unmet (p. 98). For example, looking to the example illustrated in Figure 11, a prisoner might recognise his need for progression-related information but not know legal rights to this, and while able to access to a solicitor, he chooses not to seek information from this source because this task appears too difficult or he does not trust this source. Such stages where individuals may choose not to proceed with the information search resulting unmet needs are reflected at multiple points in Figure 11. Such behaviour links to Wilson's (1997) activating mechanisms, particularly the influence of risk/reward evaluations in determining motivation to seek information; i.e. if a prisoner perceives the risks associated with attaining information as outweighing the rewards, he is unlikely to feel sufficiently motivated to seek information. Overall, findings suggest that prisoners' information needs may be complicated by related needs which if left unresolved, are likely to result in the initial need also remaining unmet, providing important further insight into reasons why prisoners' information needs may be unmet, particularly those of a complex nature.

In summary, findings present evidence which offers valuable insight into the complexity of prisoners' information needs. There is evidence of complex interwoven needs which may form part of a larger goal (e.g. preparation for release) and the potential for the uncertainty associated with such needs to trigger and/or exacerbate negative emotional states (e.g. anxiety) which are recognised as having the potential to negatively influence information seeking (Case and Given, 2006; Kuhlthau, 1991, Wilson, 1997) and prisoners' rehabilitation (Day, 2009). Findings also highlight the potential for recognition of an information need to trigger recognition of a further related need (or needs) which must be resolved before the initial need can be addressed, and it is noted that individuals may leave needs unmet if the task of addressing related needs is considered too arduous (Case, 2002). This behaviour links to risk/reward evaluations in which costs of attaining information is weighed against benefits and which ultimately influence motivation to seek information (Wilson, 1997), offering further insight into how issues around complexity can influence the meeting of prisoners' information needs. Overall, findings present evidence which offers insight into the complexity of prisoners' information needs and reasons why complex and/or interrelated needs may be difficult for prisoners to address and often unmet.

5.2.3 The impact of unmet information needs in the prison context

Findings of this study offer valuable insight into the detrimental impact of unmet information needs in the prison context, building upon previous work (i.e. Canning and Buchanan, 2019) which suggests that unmet sensitive information needs on emotional topics and coping with imprisonment can

negatively influence prisoners' rehabilitation. This study provides much needed additional evidence and depth of insight into how unmet needs on a range of topics (e.g. law, rehabilitation, the prison regime, reintegration, relationships, drug abuse, and mental health) can contribute to negative outcomes (including consequences for prisoners' sentence progression, rehabilitation, reintegration, mental health, and relationships) and further contribute to the stressful experience of imprisonment.

One identified negative outcome was the potential for unmet information needs to extend the duration of prisoners' sentences. For example, one participant of this study explained that prisoners could end up spending longer in prison than necessary due to a lack of legal information on their rights to appeal; "It can be devastating for some people. It could mean being given a life sentence as opposed to […] a sentence for a culpable homicide which makes a complete difference to your life." Some participants were concerned that a lack of information on the rehabilitation courses they would be required to complete prior to their release could lead to spending more time in prison than was necessary. For example, one participant explained, "I want to know or I'll no get moved on; it means I could end up doing more time." One participant felt that the lack of information required to resolve relatively "simple problems" in the prison could lead to prisoners being "really pissed off, really angry, fighting, and kicking doors and stuff", and it is recognised that acts of aggression and/or violence are liable to result in disciplinary measures which could also potentially extend prisoners' sentence; such emotional and behavioural issues are also recognised as having the potential to negatively influence prisoners' rehabilitation (e.g. Day, 2009). Chatman (1999) explains that "for many inmates returning to society is a significant achievement" (p. 209) and it is therefore understandable that any potential sentence extension is liable to cause distress. As such, findings demonstrate how unmet information needs on a range of topics may not only negatively influence prisoners' sentence progression, but also have potential consequences for prisoners' mental health and rehabilitation.

Interview discussions also suggest that unmet information needs relating to particularly stressful stages of imprisonment, such as initial adaptation to prison life and preparation for release, can further contribute to negative emotional and mental health states. Initial adaptation to prison life is recognised as a time when prisoners are particularly liable to experience emotional and mental health issues (Nacro, 2009; Rafedzi and Abrizah, 2014; Zamble and Porporino, 1988), and findings of this study offer valuable insight into how unmet information needs relating to the prison regime may exacerbate feelings of stress during this time. For example, one participant explained that he had received insufficient information on 'strip-search' protocols despite it being his first prison sentence which led to his admission being "a traumatising experience". Discussing the topic of reintegration into society following release from prison, another participant explained, "after such a long time in prison, people don't realise just how frightening it can be when you hit that street." Priestly *et al.*

(1984) describe “gate fever” as a (non-medical) condition characterised by anxiety which is commonly experienced by prisoners nearing the end of their sentence (p. 2), and Zamble and Porporino (1988) explain that this condition may be more extreme for those serving long-term prison sentences (which includes all participants of this study). Findings therefore draw attention to the importance of ensuring prisoners’ information needs are met during these particularly stressful stages of imprisonment to ensure that they are not faced with additional anxiety and/or mental health issues, which again could have negative consequences for their rehabilitation (Day, 2009).

Further evidencing the detrimental impact of unmet information needs, findings suggest that unmet needs have the potential to trigger and/or exacerbate other needs on related topics. For example, unmet relationship needs were recognised by participants of this study as having the potential to cause “stress” and “depression”, unresolved met mental health issues as having the potential to lead to prisoners engaging in drug abuse as a way of coping the with “trauma” associated with confronting their criminal behaviour, and ongoing drug abuse as potentially leading to prisoners refusing visits from family for fear that “their family will notice it [signs of their drug abuse]”. The problematic cycle resulting from these unmet needs is illustrated in Figure 12 below.

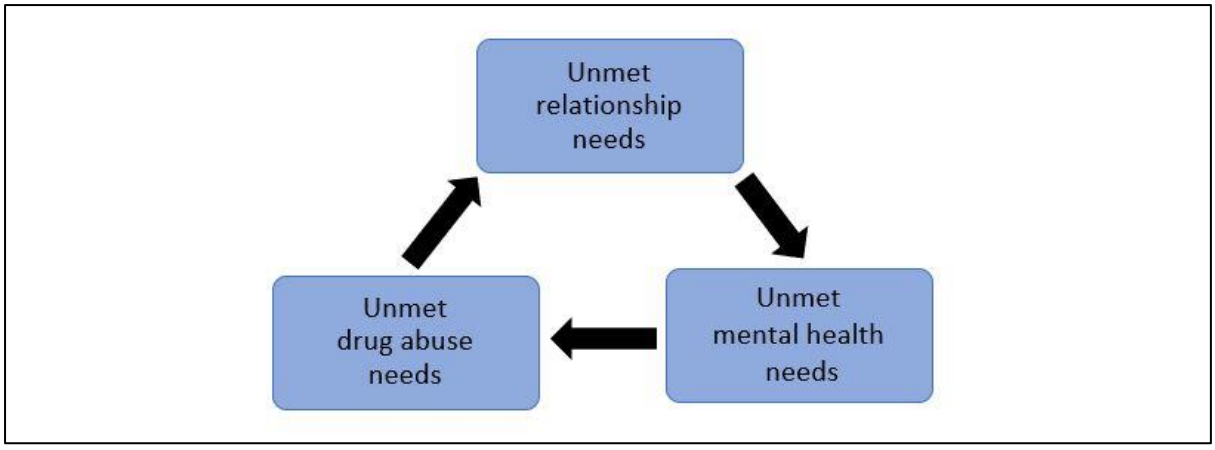

Figure 12 Example of a cycle of unmet need

From a holistic viewpoint, findings therefore suggest the potential for unmet information needs to trigger additional and/or complicate existing information needs on other topics, which may also subsequently be left unmet. Offering insight into how this can negatively impact prisoners’ ability to cope with imprisonment and their general wellbeing in the long-term, Zamble and Porporino (1988) explain that “the person who does not work to resolve those problems that are amenable to change is likely to have things accumulate until they wear him down or break him” (pp. 59-60). Therefore, building upon previous discussion regarding the complexity of prisoners’ information needs, findings also demonstrate how relationships between categories of unmet need can lead to a problematic cycle of unmet need and potentially impact upon prisoners’ mental health and coping abilities.

Importantly, this study also presents evidence which suggests that unmet information needs relating to mental health (the most frequently reported category of unmet need in this study) can be a factor contributing to significant negative outcomes. For example, one participant explained that, in his opinion, a prisoner he knew had committed suicide because "his mental health issues were going unaddressed". Similarly, another participant explained that, in his opinion, three prisoners he knew had committed suicide because "they have mental health problems and they're too scared to speak about it, rather than speaking about it […] they're just killing themselves, thinking that's the easiest option." Offering further insight into the tendency for prisoners to hide sensitive information needs relating to mental health and alluding to negative consequences, one participant explained, "They [prisoners] will keep it to themselves until it comes to a point where it breaks through, and it's going to, it's going to. There's only one place for it, it's like a volcano, it's like shaking a soda bottle". Courtenay and Sabo (2001) highlight the importance of prisoners having "good knowledge and information about how to maintain one's health" so that they can mitigate against the development of poor mental and physical health (p. 162). Building on this, Skogstad *et al.* (2006) argue, "The failure of suicidal individuals to access treatment has potentially severe and fatal consequences, particularly in settings such as prisons" (p. 2). Therefore, if prisoners do not recognise or understand early signs of poor mental health and take steps to address this, there is an increased risk of suicide. It is important to note that suicide rates in Scottish prisons are more than 2.5 times higher than those of the general population (Fazel *et al.*, 2017). With this in mind, the issue of unmet mental health needs is significant.

In summary, findings offer valuable insight into the detrimental impact of unmet information needs in the prison context, suggesting that unmet information needs on topics such as the law and rehabilitation can contribute to emotional and behavioural issues which can negatively influence prisoners' sentence progression and rehabilitation and that unmet information needs relating to the prison regime and reintegration can exacerbate negative emotional states during already stressful stages of imprisonment (i.e. initial adaptation to prison life and preparation for release). Findings also suggest that unmet information needs on related topics (e.g. relationships, mental health, and drug abuse) can accumulate, triggering a problematic cycle of unmet need to the detriment of prisoners' mental health and coping abilities. Importantly, unmet information needs relating to mental health appear to have the potential to contribute to negative outcomes such as suicide; a significant issue given that reported suicide rates in Scottish prisons are 2.5 times higher than in the general population (Fazel *et al.,* 2017). Overall, findings highlight the importance of ensuring prisoners' information needs are met despite the practical and procedural restrictions of prison life.

5.2.4 Overview of discussion relating to information needs

In summary, findings offer valuable insight into a wide range of prisoners' information needs including (from most to least frequently discussed by participants) mental health, relationships, the prison regime, education, rehabilitation, reintegration, physical health, law, and recreational interests. This study presents evidence which suggests that the sensitivity of information needs relating to mental health, relationships, and learning issues is heightened in the prison context and this is attributed to the risk of stigma associated with deviating from masculine social norms but also the risk of prisoners being assigned additional rehabilitative courses after revealing sensitive needs to staff. In response, prisoners weigh up the benefits of seeking to address such needs against the risks associated with doing so and the typical outcome of such risk-reward evaluations appears to often be inaction. Findings also offer insight into the complexity of prisoners' information needs, including the potential for the uncertainty associated with complex interwoven needs which form part of a larger goal (e.g. preparation for release) to trigger and/or exacerbate negative emotional states (e.g. anxiety) which are detrimental to prisoners' mental health and rehabilitation. Evidence demonstrates how the task of addressing information needs can be complicated by the existence of related needs which must be first resolved, and which can have an overwhelming effect on individuals, resulting in lower levels of motivation to seek information to address such needs. Findings also offer insight into the detrimental impact of unmet information needs in the prison context, including the potential for unmet needs to contribute to emotional and behavioural issues which can negatively influence prisoners' sentence progression and rehabilitation, exacerbate negative emotional states during already stressful stages of imprisonment, and accumulate and detrimentally impact prisoners' mental health and coping abilities in the long term. Notably, findings suggest that unmet information needs relating to mental health can contribute to significant negative outcomes such as suicide, highlighting the importance of ensuring prisoners' information needs are met, particularly those relating to mental health, despite the practical and procedural restrictions of prison life.

Looking to the theoretical framework of this study, findings present evidence of the influence of stress/coping strategies, risk/reward evaluations, and social learning behaviours on prisoners' information behaviour, contributing to understanding of the influence of *activating mechanisms* as presented in Wilson's (1997) Revised General Model of Information Behaviour in the prison context. Findings also provide evidence of the *compromising* of information needs to meet the requirements of an information source or system as proposed in Taylor's (1968) question-negotiation theory and offer further insight in the interpersonal (person-to-person) context, with prisoners engaging in indirect discussion of sensitive information needs with others to minimise associated social risks. There is also evidence of prisoners engaging in self-protective information behaviours, such as *secrecy*

and *deception,* in response to risks associated with revealing and/or seeking to address information needs which are in contravention to the social norms of the prison, linking to concepts in Chatman's (1996; 1999) information poverty and small world theories and contributing to understanding of these in the hypermasculine context of all-male prisons.

5.3 What sources of information do prisoners use and why?

Findings of this study offer a useful overview of the range of information sources available to prisoners and factors influencing interactions with these. Analysis of interviews identified a range of interpersonal sources of information which were commonly discussed by participants, including other prisoners, prison officers, healthcare professionals, family, and teachers. Also discussed but more often in terms of limitations, were forms of media (i.e. television, radio, newspapers, and magazines), solicitors, learning centre resources (i.e. legal texts, encyclopaedia software, and library books), friends (outside of the prison), printed prison resources (i.e. posters and the prison induction booklet), social workers, and Listeners (prisoners trained by the Samaritans to provide emotional support to their peers). Discussed to a lesser extent were the prison chaplain, prison librarian, addiction support services, and physical training instructors. Professional staff were often approached for information considered relevant to their role (e.g. prison officers for information on the prison regime, healthcare professionals for health-related information, teachers for educational information, and solicitors for legal information). Other interpersonal sources were approached for information on specific topics for reasons such as lived experience (e.g. seeking information on the prison regime from other prisoners) and trust (e.g. seeking information on sensitive topics from).

Table 5, on the following page, presents an overview of the current level of empirical research on the information sources available to prisoners, including details of samples and methods (where provided). The level of evidence to support findings (i.e. identified sources) in each study is specified under three headings; empirical evidence provided, limited empirical evidence (e.g. summary reporting of qualitative evidence and/or statistical data), and no empirical evidence provided.

Table 5 *Information sources: comparison of findings to existing empirical studies*

		Current Study	Canning & Buchanan 2019	Sambo *et al.* 2017	Emasealu & Popoola 2016	Bajić 2015	Tarzaan *et al.* 2015	Eze 2014	Rafedzi & Abrizah 2014	Nacro 2009	Omagbemi & Odunewu 2008	Chatman 1999	Stevens 1994
Prisoner sample	Includes adults	√	√	ns	ns	√	ns	ns	X	√	√	√	ns
	Includes males	√	√	√	√	√	ns	ns	√	X	ns	X	ns
Method	Qualitative	√	√	X	X	X	X	√	√	√	X	√	√
	Quantitative	X	X	√	√	√	√	√	X	X	√	X	X
Information sources	Learning centre resources												
	Healthcare professionals												
	Other prisoners												
	Prison officers												
	Family												
	Media												
	Solicitors												
	Teachers												
	Friends (outside prison)												
	Prison chaplain												
	Printed prison resources												
	Prison librarian												
	Social workers												
	Addiction support services												
	Listeners												
	Physical training instructors												

Key	ns	not specified		empirical evidence provided		limited empirical evidence provided		no empirical evidence provided

Table 5 highlights the current lack of research into the information sources used by prisoners; particularly adult males with whom this study is concerned. Similar to previous discussion regarding the existing level of research on prisoners' information needs, of the few which include adult male prisoners in their sample, only one study presents qualitative data to evidence findings (i.e. Canning and Buchanan, 2019). Again, several studies fail to specify important details of their sample (i.e. Eze, 2014; Omagbemi and Odunewu, 2008; Sambo *et al.*, 2017; Stevens, 1994; Tarzaan *et al.*, 2015). Other

relevant studies which present qualitative data to evidence findings have focused on female prisoners (i.e. Chatman, 1999; Nacro, 2009) or juvenile prisoners (i.e. Rafedzi and Abrizah, 2014), and with adult males constituting the vast proportion of prisoners worldwide (World Prison Brief, 2021), there is a troubling research deficit regarding this group. There is also a lack of detail on specific source categories identified in existing work; for example, Sambo *et al.* (2017) identify "prison staff" as a source but do not describe the roles this covers, and Stevens (1994) identifies "civilian staff" as a source but again, does not describe the roles (which could potentially include teachers, healthcare professionals, social workers, etc.). In contrast, where sources identified in this study are grouped into categories (e.g. legal texts, library books, and encyclopaedia software under 'learning centre resources'), detail of the sources included in these categories is specified. The current study also evidences sources unidentified in previous work (i.e. addiction support services, Listeners, and physical training instructors) and offers insight into sources previously only identified with limited evidence (i.e. the prison chaplain, prison librarian, and social workers).

In addition to identifying a range of information sources available to prisoners, this study also presents valuable evidence of a range of 'intervening variables' which influence interactions with sources as proposed by Wilson (1997), offering much needed further insight into factors which influence prisoners' information seeking behaviour. For example, findings present evidence of the influence of role-related characteristics; for example, as previously discussed, professional staff were often approached for information considered relevant to their role. Findings also evidence the influence of personal characteristics such as attitudes towards other social groups; for example, participants reported frequently seeking information from sources such as family who were viewed as "reliable" and teachers who were described as "helpful" but appeared reluctant to seek information from sources who were viewed as holding a condescending view of prisoners, such as social workers, healthcare professionals, and some prison officers. Findings also evidence the influence of source accessibility; for example, participants reported that it could take months to get a relatively short appointment with healthcare professionals during which only a limited number of health concerns could be discussed, and solicitor appointments were also discussed as being difficult to arrange and often too brief. Evidencing another influencing factor, it was also noted that participants rarely discussed friends outside the prison as sources and this was partially attributed to the potential for communication with this source to leave prisoners feeling more acutely the pains and deprivations of their imprisonment; for example, discussing friends outside the prison going on holiday, one participant explained, "because I'm here and we can't really enjoy ourselves [...] that's just information I don't need to hear." Further issues are discussed in section 5.4 of this chapter.

In the following sections, discussion focuses on the key themes which emerged from analysis of findings relating to the information sources available to prisoners and factors influencing engagement with these, categorised as factors promoting use and/or preference for interpersonal information sources, the value of lived experience in information seeking, and how the sensitivity of information needs influences selection of sources.

5.3.1. Factors promoting prisoners' use and/or preference of interpersonal sources

Participants of this study most frequently discussed interpersonal sources of information (i.e. prison officers, prisoners, healthcare professionals, family, and teachers) and expressed a general preference for this type of source, in line with assertions that humans typically prefer interpersonal forms of communication (Case and Given, 2016, Harris and Dewdney, 1994).

One factor contributing towards prisoners' preference for interpersonal sources of information appears to be the issues associated with a range of non-interpersonal information sources. For example, learning centre resources such as library books were acknowledged as "good for information that's past" but not useful for seeking up-to-date information, the information available on encyclopaedia software was described as "limited", and it was felt that the legal texts available in the prison library "aren't up to date". Printed prison resources were also associated with various issues; for example, one participant felt that posters encouraging prisoners to discuss their mental health "don't really offer many options or outlets to do so", while others described the prison induction booklet as "misleading" and "not comprehensive enough". Some participants also discussed the limitations of information obtained via media platforms such as television, radio, and magazines; for example, one participant explained that "scarce" media coverage made it difficult to keep up-to-date with new movie releases, leaving him reliant on a friend to keep him informed during visits or phone calls, and another participant explained that the limited information in the music magazine he subscribed to did not allow him to keep updated with his interest in new music releases. While similar issues associated with non-interpersonal sources are frequently reported in existing work (e.g. Bajić 2015; Canning and Buchanan, 2019; Emasealu and Popoola, 2016; Eze, 2016; Omagbemi and Odunewu, 2008; Rafedzi and Abrizah, 2014; Sambo *et al.,* 2017), findings of the current study provide further evidence of and depth of insight into such issues.

Findings also suggest that demographic variables relating to the generally lower levels of functional literacy within prison populations may contribute towards this preference for interpersonal sources of information. For example, discussing how prisoners with literacy issues might experience difficulties in accessing legal information, one participant commented, "there's a lot of prisoners that can't read and write […] they don't know that they should have the right to appeal or they could have appealed".

Supporting this, Campbell (2005) points out that the sources of information normally accessible to prisoners with functional literacy issues are unlikely to provide the legal information they require, explaining, "Obviously, someone who is illiterate relies more on gathering information from personal contacts and television. These are not normally ways in which useful legal information is found" (p. 23). In 2018, an FOI request revealed that 70% of Scottish prisoners who voluntarily participated in literacy/numeracy screening were functionally illiterate (i.e. lacking the reading and writing skills normally required to obtain employment) (Scottish Prison Service, 2018). In recognition of this issue, one participant suggested that prisons offer classes or access to a member of staff who could assist prisoners with literacy issues to access legal information, which leads on to another factor contributing to prisoners' preference for interpersonal sources; the ability to seek information *by proxy*.

McKenzie (2003) explains that *seeking by proxy* occurs when an individual other than the primary information seeker engages in information seeking on their behalf (p. 30). Demonstrating this mode of seeking, one participant in this study explained that he would approach his personal officer first for any information because he knew that if she was unable to provide an answer, "she'll find someone who can". Findings also suggest that prisoners frequently engage in seeking by proxy due to certain information in the prison being available only via *gatekeepers*; individuals who control access to information and can "shape, emphasize, or withhold it" (Case and Given, 2016, p. 333). For example, several participants explained that due to their inability to access the internet, they would often ask prison staff (e.g. prison officers and teachers) to "Google" topics on their behalf, and this appeared to promote prisoners' use of these sources and contribute to them being regarded as valuable. McKenzie (2003) explains that seeking by proxy also offers an avenue through which individuals can be assisted to recognise their information needs (p. 27), and findings of this study support this by demonstrating the potential for interactions with interpersonal sources to assist prisoners to recognise and/or better understand the issues they are experiencing. For example, one participant explained, "For years you suppress your emotions in here […] I didn't know what was happening but I was talking to a guy and he just *snaps fingers* said something that made me twig [understand]". Taylor (1968) explains that when an individual is aware of the vague discomfort caused by a need but does not understand it, this presents a key zone for external intervention whereby interaction with interpersonal sources may assist in recognition and understanding of the need (p. 182), and it is clear in this participant's statement that speaking to another prisoner assisted him to better understand his own situation, better positioning him to recognise associated needs. Interactions with interpersonal information sources may therefore not only enable information seeking by proxy and permit access to otherwise inaccessible information, but also support recognition and/or understanding of needs.

Findings also suggest that interacting with interpersonal sources can positively affect prisoners' mental health, suggesting a further factor contributing to this preference for such sources. For example, one participant explained that talking to his mum on the phone about "mundane things" helped him to feel "alive and normal" and similarly, another participant explained that "talking rubbish" on the phone to his mum helped to relieve his feelings of depression and loneliness "without even needing to say, 'Oh I'm feeling down today. I'm a bit lonely'". Such statements demonstrate how simple everyday conversations based on the mutual seeking and sharing of information with family members, particularly mothers, can positively impact upon prisoners' mental health and relieve feelings of loneliness. Given that non-interpersonal sources (e.g. learning centre resources) are not capable of providing social and/or emotional support, findings therefore suggest another potential reason for prisoners' preference for an interpersonal approach to information seeking. It is recognised that such conversations may not only have the potentially to positive influence prisoners' prisoners' mental health but also their relationships with family, which are recognised as being "of vital importance" to prisoners (Gravett, 1999, p. 20) and which can play a crucial role in supporting prisoners' desistance from crime (Condry, 2012). Findings therefore highlight the value of seeking and/or sharing information with family in relation to not only the meeting of prisoners' information needs, but also in supporting prisoners' general wellbeing, family relationships, and rehabilitation.

In summary, findings suggest that prisoners possess a general preference for interpersonal information sources. This is partially attributed to the issues frequently associated with non-interpersonal information sources, which were often viewed as providing outdated and/or limited information and which could be difficult to access for those with functional literacy issues. The ability to seek information *by proxy* via interpersonal sources also appears to contribute to this preference, with benefits of this mode of searching including the potential for prison staff to seek information on prisoners' behalf from sources which may be difficult for prisoners to access themselves. Findings also demonstrate the potential for seeking by proxy via discussion of needs with interpersonal sources to help prisoners to recognise and/or better understand their needs, presenting further evidence to support arguments for the benefits of this mode of seeking for recognition and understanding of needs (e.g. McKenzie, 2003; Taylor, 1968). Findings also highlight emotional benefits stemming from interactions with interpersonal sources, with participants describing everyday conversations based on the mutual seeking and sharing of information with their mothers as having the potential to relieve negative emotional states (e.g. loneliness). Overall, findings evidence a range of benefits stemming from prisoners' interactions with interpersonal sources of information, offering insight into factors promoting prisoners' use of such sources.

5.3.2 The value of lived experience in information seeking

Lived experience, from a phenomenological perspective, purports that only individuals who have direct experience of a phenomenon can fully understand it and are said to possess a special kind of knowledge that is unique to their situation (Guenther, 2019; Mapp, 2008; Neubauer *et al.,* 2019). The value of lived experience as a source characteristic in the prison context is evident in findings of this study and participants' reasons for seeking information from other prisoners. The value of information informed by lived experience has been recognised in previous studies in the healthcare context; specifically, patients' coping with diagnosis of disease and associated symptoms (e.g. Locock and Brown, 2010; Mazanderani *et al.*, 2013; Ussher *et al.,* 2006). Findings of this study offer new insight into the importance of lived experience in the arguably similar stressful context of imprisonment.

In this study, other prisoners were the most frequently discussed source in interviews and, in addition to source characteristics such as accessibility, findings suggest that prisoners' frequent use of this source is partially due to the value attributed to information informed by lived experience in the prison context. For example, one participant reflected that, at the start of his sentence, he had often asked other prisoners (as opposed to staff) for information on the prison regime, explaining, "I would rather go to a con [prisoner] because they're there, they're living it, they're experiencing it." This sentiment was echoed by several other participants, including one who also felt that information informed by lived experience was particularly valuable at the start of a prison sentence; "You can use other people's experiences [...] their knowledge to prepare yourself." Such perspectives link to Chatman's (1999) theory of insiders and outsiders in information seeking (drawn from Merton's (1972) sociology of knowledge); as individuals already integrated into prison life were viewed as holding valuable information on how it functioned, as opposed to staff who did not possess this first-hand experience. Chatman (1999) further explains that "through observing others and talking to prisoners who have dealt with this problem, they become informed about how to respond to their problems" (p. 209). Offering further insight, examining peer support and illness narratives in the health context, Mazanderani *et al.* (2013) found that information obtained from individuals with lived experience of a medical condition had "biographical value" (p. 892), and that such individuals possessed "a special type of knowledge that, no matter how well read or trained you are, you simply cannot achieve unless you have lived with one [a medical condition]" (p. 896). In line with this, one participant in the current study explained that, while those without direct experience of imprisonments could imagine what it was like to be a prisoner, they could never truly understand the prisoner experience; "It's like you being in the jail, in a cell, you could imagine how it is but you wouldn't understand until you'd really done it". Findings of this study therefore demonstrate how lived experience of imprisonment adds a degree of credibility and insight to information which is highly valued by prisoners.

Findings also suggest that those new to prison life seek information from experienced prisoners because doing so can help them to identify strategies for coping with their own imprisonment. For example, one participant explained that shortly after his admission to prison, he had sought advice from a prisoner who had already spent over a decade in prison, explaining; "It was good to get advice […] I always think to myself, "If I'm doing a long time I'm gonna need to find a way of coping with this long time." In line with this, Chatman (1999) found those new to prison life often seek information from those who had spent significant time in prison because they are viewed as possessing valuable information on how to cope and "beat or survive the system" (p. 212). Such behaviour links to social learning theory; the learning which occurs within a social context, in which individuals learn from one another (Bandura, 1971). The central construct of this theory is the concept of s*elf-efficacy* which Bandura (1977) defines as, "The conviction that one can successfully execute the behaviour required to produce the outcomes" (p. 193). In the healthcare context, Ussher *et al.* (2006) examined the benefits of participation in cancer peer support groups for those recently diagnosed with cancer and found that seeing others coping with this condition helped them to feel better about their own situation. With this in mind, prisoners who provide information on how they have coped thus far with their imprisonment may not only offer useful information to newly imprisoned individuals, but also provide reassurance to others that they too will be able to cope with the stresses of prison life.

Interview discussions also suggest that the seeking and sharing of information based on lived experience may also contribute to the development of social bonds between prisoners. For example, some participants discussed how "small chat" with other prisoners on topics such as their reason for imprisonment, length of sentence, and general wellbeing in helped to "break the ice", suggesting a crucial starting point for the development of friendships with other prisoners. The role of mutual information exchange and self-disclosure in the development and maintenance of close personal relationships is recognised in the field of sociology (e.g. Altman and Taylor, 1973; Hays, 1984), and Ricciardelli (2014) notes that friendships between prisoners are often established through the sharing of lived experience and that strong social bonds can help prisoners to cope with prison life by giving them "a sense of belonging" (p. 427). However, Corley (2001) draws attention to the difficult task of establishing trusting relationships with other prisoners (p. 106):

> Prison is not an environment conducive to building friendships. […] Prisoners feel that it is better to keep one another at arm's length, not to get too close, for to get close opens up the possibility that somebody might be in a position to cause them harm.

Therefore, while findings of this study suggest that the seeking and sharing information informed by lived experience may aid in the formation of friendships in prison and help those newly imprisoned to integrate into existing social groups, consequently helping them to prepare for and better cope with

the stresses of prison life, it is acknowledged that prisoners may not always be willing to share information with others (trust issues are discussed in section 5.4.2 of this chapter).

In summary, findings suggest that lived experience is a highly valued source characteristic in the prison context. Participants frequently reported seeking information on the prison regime from other prisoners and this was often attributed to the view that information obtained from other prisoners was more credible due their lived experience of the situation (in contrast with prison staff). This supports propositions of Chatman's (1996; 1999) information poverty and small world theories, which assert that individuals living in small worlds (such as prisons) often perceive information from *insiders* (i.e. sources with personal experience of the situation) as more relevant and useful than that obtained from *outsiders* (i.e. sources lacking personal experience of a similar situation). Findings also suggest that by seeking information from other prisoners who had experienced similar situations, prisoners can not only obtain useful information but can be reassured that they too could cope with such situations, helping to increase feelings of self-efficacy and evidencing social learning as proposed by Bandura (1977) and incorporated in Wilson's (1997) Revised General Model of Information Behaviour. Findings also highlight how seeking and sharing information informed by lived experience may aid in the formation of friendships in prison and help those newly imprisoned to integrate into existing social groups; consequently, helping them to better cope with prison life. Overall, findings highlight several benefits of seeking information informed by lived experience (i.e. obtaining credible information, increasing self-efficacy, and building friendships) demonstrating why this source characteristic is valued in the prison context.

5.3.3 The relationship between sensitivity of needs and selection of sources

As previously discussed in the earlier section on information needs, findings evidence information needs which are sensitised in the prison context (i.e. relating to mental health, relationships, and learning issues) and highlight factors which contribute to the sensitivity of these (i.e. risk of stigma and/or violence, and of progression being negatively affected). In addition, findings of this study suggest that when prisoners seek do information on sensitive topics, they are highly selective of the sources they use; generally, only discussing such needs with trusted family members and prisoner friends or seeking information from sources such as television which offers privacy. This demonstrates the influence of intervening variables on information seeking as proposed by Wilson (1997); particularly role related and/or interpersonal characteristics, such as personal attitudes towards sources. Key findings regarding the relationship between the sensitivity of prisoners' information needs and their selection of sources are discussed below.

Interview discussions suggest that prisoners often prefer to seek information on sensitive topics from family members, particularly mothers with whom everyday conversations could also help to meet prisoners' emotional needs (as previously discussed in section 5.3.1). For example, one participant explained that his family helped him "emotionally" and with them he felt able to "talk about stuff that I couldn't talk to anyone else about." While this preference towards seeking and sharing information on personal topics with family may be considered natural in any given context, Buchanan *et al.* (2019) offer further insight, noting that continuity of relationship appears to be an important factor in the formation of trust conducive to effective information interactions in disadvantaged and dependent circumstances. Given the prevalence of distrust and risk factors within the prison environment, it is perhaps unsurprising that prisoners may prefer to seek information from family, with whom they can have the most established and trusting relationships. For example, linking to findings of this study, Zamble and Porporino (1988) found that prisoners often sought support for personal issues from family as opposed to other prisoners because, "The macho image they [prisoners] often felt compelled to adopt in public made it difficult for them to discuss their problem with associates [other prisoners]" (pp. 58-59). With the maintenance of family relationships noted as playing a crucial role in supporting prisoners' desistance from crime (Condry, 2012), the seeking and/or sharing of sensitive information with family may play a positive role in the maintenance of prisoners' relationships and their rehabilitation. However, roughly 1 in 10 prisoners in Scotland report that they do not have regular contact with family (Carnie and Broderick, 2019, p. 17) and this study's findings suggest that some prisoners may be reluctant to discuss mental health needs with family due to issues relating to self-esteem and prison telephones (discussed in section 5.4). It is therefore acknowledged that some prisoners may be unable and/or unwilling to seek information on sensitive topics from this source.

Highlighting another avenue through which prisoners can attempt to address sensitive information needs, this study presents evidence which suggests that some prisoners seek and share information on sensitive topics from/with prisoners they consider friends. For example, one participant explained that when he was experiencing "down days and things like that", he often sought information from his "own network in here" (referring to other prisoners), as opposed to discussing the issue with people outside of the prison. Similarly, another participant explained that when confronting issues "of the heart" such as relationship problems, he preferred to approach his "close circle" in the prison for information and support. It is acknowledged that prisoners may be more immediately accessible for information and support than family, suggesting a potential reason for this preference at times. However, offering further insight, one participant explained that after living in the same hall for years, other prisoners could become "like family" which implies a level of trust that reduces the risk of negative consequences resulting from articulating sensitive information needs to this source. This also

evidences the importance of continuity of relationship in the formation of trust conducive to effective information interactions in disadvantaged and dependent circumstances as proposed by Buchanan *et al.* (2019). It was previously noted that the development of strong social bonds with other prisoners can help individuals cope with their imprisonment (Ricciardelli, 2014), and findings of this study also suggest that such friendships also provide a safe avenue through which prisoners can seek and share information on sensitive subjects. However, findings also suggest that prisoners may be unwilling to confide in other prisoners (even close friends) due to the risk that sensitive information could be passed on to others (trust issues are discussed in section 5.4.3) and it is therefore recognised that not all prisoners will be willing to reveal sensitive information needs to prisoners they consider friends.

Despite the various issues associated with non-interpersonal information sources discussed earlier in this section (e.g. viewed as providing limited and/or outdated information), findings nonetheless suggest that such sources can be useful in helping prisoners to address sensitive information needs, by offering them an avenue through which information can be obtained privately. For example, one participant felt that the majority of information that prisoners acquired came from television, and when asked why he felt this was, he explained, "I would have said it was safe, because at the end of the day, no one knows what you're watching." This notion of watching television as a 'safe' method of obtaining information due the privacy offered implies that other methods may be 'unsafe' due to the other individuals being present and/or aware of what information is being sought; linking to Chatman's (1996) assertion that in information impoverished circumstances, seeking information from interpersonal sources carries a social risk (p. 203). Jewkes (2002) explains that in prisons, media such as television can offer prisoners "a refuge from the demands of public presentation and the rigours of social life" (p. 21), offering further insight into the sense of "safety" and relief which such sources can offer prisoners. Non-interpersonal sources, such as television, offering prisoners a way to privately acquire information (whether actively or passively) without the need to risk public violation of social norms; linking to Wilson's (1997) recognition of risk/reward evaluations as influencing information behaviour and previous discussion of the risk of stigma associated with sensitive information needs (see section 5.2.1). However, given prisoners' lack of control over the timing and content of television programmes, interactions with this source are liable to result in information acquisition through "passive attention" as opposed to the active seeking (Wilson, 1997, p. 562), and the likelihood of prisoners obtaining the specific information required to address sensitive needs is relatively low. As such, there may still be a need for prisoners to interact with interpersonal sources if they are to access the information required to address their sensitive information needs.

In summary, findings suggest that prisoners are selective of the sources they use when seeking and/or sharing information on sensitive topics. Some participants reported a preference to discuss personal

issues with family and this was attributed to established bonds and feelings of trust, and while findings indicate a general reluctance to discuss sensitive topics with other prisoners due to issues of trust, some participants reported feeling comfortable seeking and sharing such information with prisoners who they had known for years and considered trustworthy friends; supporting previous work which asserts that continuity of relationship is an important factor in the formation of trust conducive to effective information interactions in disadvantaged and dependent circumstances (Buchanan *et al.,* 2019). Findings also highlight the value of seeking information on sensitive topics via non-interpersonal sources (such as television) which offer privacy and carry no element of social risk (e.g. stigma); evidencing information behaviour as influenced by social risk as proposed by Chatman (1996) and risk/reward as incorporated in Wilson's (1997) model. Findings also present further evidence of the impact of intervening variables relating to interpersonal (i.e. distrust) and environmental (e.g. lack of privacy) characteristics on information behaviour as proposed by Wilson (1997). Overall, findings suggest that prisoners prefer to seek information from trusted interpersonal sources and/or non-interpersonal sources which offer privacy when seeking to address sensitive information needs.

5.3.4 Overview of discussion relating to information sources

In summary, findings provide both breadth and depth of understanding in relation to the information sources available to prisoners, including other prisoners, prison officers, healthcare professionals, family, teachers, media (i.e. television, radio, newspapers, and magazines), solicitors, learning centre resources (i.e. legal texts, encyclopaedia software, and library books), friends (outside of the prison), printed prison resources (i.e. posters and the prison induction booklet), social workers, Listeners (prisoners trained by the Samaritans to provide emotional support to their peers), the prison chaplain, the prison librarian, addiction support services, and physical training instructors.

This study also presents evidence which offers specific insight into factors influencing engagement with sources. For example, prisoners appear to possess a general preference for interpersonal sources and this is attributed to issues associated with non-interpersonal sources (which are viewed as providing outdated or limited information and/or being inaccessible to individuals with literacy issues), and benefits associated with seeking information by proxy through interpersonal sources (including benefits for recognition and/or understanding of needs and enabling access to otherwise inaccessible sources such as the internet). Also evident were the benefits arising from communication with family (especially mothers) which appeared to help prisoners not only obtain information on sensitive topics, but also relieve their negative emotional states (e.g. loneliness), help maintain vital relationships, and even support prisoners' rehabilitation. Findings also suggest that prisoners view information obtained from other prisoners who have lived experience of imprisonment as having

greater credibility than that obtained from prison staff, and information informed by lived experience appears to not only have the potential to help prisoners feel more optimistic about their ability to cope with imprisonment, but also aid in the formation of friendships which can help prisoners to cope with prison life. Evidence presented in this study also indicates that prisoners prefer trusted interpersonal sources (i.e. family or prisoner friends) and/or non-interpersonal sources which offer privacy (i.e. television) when seeking information to address sensitive needs; largely stemming from considerations relating to the perceived risks of disclosure and hypermasculine social norms in the male prisoner environment.

Looking to the theoretical framework of this study, findings evidence source characteristics which influence prisoners' use of information sources (e.g. trust, privacy, and accessibility), and demonstrate prisoners engaging in risk/reward evaluations and social learning behaviours which influence their motivation to seek information; linking to the influence of *activating mechanisms* and *intervening variables* as presented in Wilson's (1997) Revised General Model of Information Behaviour and contributing to the current level of understanding of these in the context of prisoners' information seeking. Findings also present evidence of prisoners attributing value to sources which can provide information informed by lived experience due to the perception that such information is more useful and credible than that which can be obtained from prison staff; linking to into *insider/outsider* concepts in Chatman's (1996; 1999) information poverty and small world theories and contributing to the currently level of understanding of these in the prison context.

5.4 What issues influence the meeting of prisoners' information needs?

Findings of this study highlight a range of issues which influence the meeting of prisoners' information needs. Analysis of interviews identified a range of key issues, including the lack of internet access which left prisoners dependant on staff to access information from this source, fear of stigma which left prisoners reluctant to seek information on sensitive topics, and telephone access and privacy issues which restricted prisoners' ability to communicate with outside sources. Also evident were issues relating to distrust of others (including prisoners, prison staff, and general distrust of the prison system) and feelings of low self-esteem stemming dependency on family and prison staff which left some prisoners reluctant to seek information from these potentially valuable sources. Further issues, discussed by fewer participants but clearly significant for those who did discuss, related to problems maintaining contact with family via visits which could restrict prisoners' ability to seek information from this potentially valuable source of information and support, drug-induced states which could leave prisoners unaware of and/or unwilling to articulate information needs to others, and isolation

during lock up times which restricted access to sources of information. Also evident were issues relating to the potential risk to sentence progression could leave prisoners reluctant to reveal mental health needs and/or attend addiction support programmes, and the prevalence of misinformation and disinformation in the prisoner network which could complicate attempts to seek information while also perpetuating issues of distrust.

Table 6, below, presents an overview of the current level of empirical research on issues which influence the meeting of prisoners' information needs, including details of samples and methods (where provided). Again, the level of evidence to support findings (i.e. identified issues) in each study is specified under three headings; empirical evidence provided, limited empirical evidence (e.g. summary reporting of qualitative evidence and/or statistical data), and no empirical evidence provided.

Table 6 Issues: comparison of findings to existing empirical studies

		Current Study	Canning and Buchanan 2019	Emsealu and Popoola 2016	Bajić 2015	Eze 2014	Rafedzi & Abrizah 2014	Nacro 2009	Chatman 1999	Stevens 1994
Prisoner sample	Includes adults	√	√	ns	√	ns	X	√	√	ns
	Includes males	√	√	√	√	ns	√	X	X	ns
Method	Qualitative	√	√	X	X	√	√	√	√	√
	Quantitative	X	X	√	√	√	X	X	X	X
Information seeking issues	Lack of internet									
	Distrust									
	Stigma									
	Isolation									
	Phone access and privacy									
	Contact with family via visits									
	Low self-esteem									
	Mis/disinformation									
	Drug-induced states									
	Risk to sentence progression									

Key	ns	not specified		empirical evidence provided		limited empirical evidence provided		no empirical evidence provided

Table 6 highlights the limited previous research into issues which influence the meeting of prisoners' information needs; particularly adult males with whom this study is concerned. Similar to the existing level of research on prisoners' information needs and use of information sources, of the few studies which include adult male prisoners in their sample, only one presents qualitative data to evidence findings (i.e. Canning and Buchanan, 2019) and several studies fail to specify important details of their sample (i.e. Emasealu and Popoola, 2016; Eze, 2014; Stevens, 1994). Other relevant studies which present qualitative data to evidence findings have focused on female prisoners (i.e. Chatman, 1999; Nacro, 2009) or juvenile prisoners (i.e. Rafedzi and Abrizah, 2014), and with adult males constituting the vast proportion of prisoners worldwide (World Prison Brief, 2021), there is a troubling research deficit regarding this group. Looking to identified issues, while prisoners' lack of internet access and issues relating to distrust and stigma are identified and evidenced in several studies (albeit to various degrees), there is currently very limited insight into other issues which influence the meeting of prisoners' information needs. Findings of the current study present much needed further insight into the issues which negatively influence the meeting of prisoners' information needs, including a number of issues unidentified in previous work (i.e. drug-induced states and risks to prisoners' sentence progression) and those previously only identified in very few studies (i.e. relating to isolation, phone access and privacy, contact with family via visits, low self-esteem, and mis/disinformation).

In the following sections, discussion focuses on key themes which emerged from analysis of findings regarding issues which negatively influence the meeting of prisoners' information needs to better understand some of the reasons why prisoners' information needs are frequently reported as unmet, categorised as access issues, social and affective issues, and stress/coping issues.

5.4.1 Access issues

Findings of this study offer valuable evidence of and insight into a range of access issues which influence the meeting of prisoners' information needs, including a lack of internet access, issues relating to prison telephones and visits, and issues relating to isolation during lock up times. These are discussed in turn and in detail in this section.

Participants' discussions suggest that prisoners' lack of internet access restricts their access to information and findings demonstrate how gatekeepers, individuals who control access to information and can shape, emphasize, or withhold it (Case and Given, 2016), can restrict prisoners' access to information via this source. For example, one participant described the difficulties of trying to "translate" and "convey" his information need to prison staff to enable them to search the internet on his behalf for the source material he required for his painting hobby and highlighted how this often meant receiving insufficient or unsatisfactory information. Another participant explained that relying

on learning centre staff to seek the information he needed for his university course from the internet not only caused "a lot of problems" but also left him feeling "quite lonely sometimes" as a result of not being able to participate in online forums with the other students on his course who were not imprisoned. Another participant described the discouraging impact of being continually directed towards the internet by external welfare agencies when trying to seek information on appealing his sentence, explaining, "you feel so frustrated because maybe they don't realise that you don't have access to the internet. [...] It puts you off kind of keeping the fight going at times." The question of whether to allow prisoners internet access remains a topic of continued debate, as despite the dangers of allowing prisoners' internet access (e.g. potentially enabling them to contact or harass victims), there are arguments to be made in support of this access being granted given that a lack of digital skills may cause difficulties for long-term prisoners (e.g. reduction in job and education prospects) who are released into an increasingly digital society and thereby increase the likelihood of them reoffending (Coates, 2016). Nonetheless, findings highlight the negative impact of prisoners' lack of direct access to information on the internet not only on the meeting of their information needs, but also potential consequences for their mental health and rehabilitation.

Also evident in findings were issues relating to prison telephones which could restrict prisoners' access to potentially valuable outside sources of information, such as family. The cost of phone calls was described as "relatively expensive in this day and age" (reportedly leaving prisoners choosing between the purchase of either essential items or phone credit), and difficulties accessing a phone due to the limited number of telephones available in each prison hall was also highlighted, with one participant explaining, "there's six phones for sixty-five, seventy prisoners so some of those phones are busy all night." Privacy concerns also appeared to leave some prisoners feeling unable and/or unwilling to communicate openly via telephone, with call monitoring and/or recording described as "an invasion of your privacy" which could cause prisoners to "bottle things up" rather than discussing sensitive issues over the phone with family. The ability for other prisoners to overhear conversations due to the location of prison telephones also caused privacy concerns. For example, one participant stated:

> They're pretty much next to people's cells […] if you do want to talk to family about a certain thing, I don't know, say for instance somebody has died and you don't want people to hear about that, it's kind of hard.

Participants also discussed the public location of telephones in prisoners' communal living areas as an issue and described the reputational risk associated with showing weakness during calls. For example, one participant explained, "if a guy that sleeps two doors away from you […] and thinks you're a strong person sees you greetin' [crying] to your boy; that's when it becomes an issue." Again, there is evidence of prisoners' reluctance to show weakness in front of other prisoners due to the risk of

stigma associated with deviating from social norms which reinforce hypermasculine traits (such as emotional and physical strength) in the prison, further demonstrating the influence of social norms in the small world of the prison (Chatman, 1999). These issues around prison telephones are significant given that findings of the most recent prisoner survey in Scotland indicated that prisoners' main method of contact with family is via telephone (Carnie and Broderick, 2019, p. 17). Also, importantly, findings of this study highlight the positive impact of communication with family on prisoners' mental health and the role of family support in helping prisoners to cope with imprisonment and to successfully reintegrate into society upon release is recognised (Condry, 2012; Gravett, 1999), therefore, any issues impeding contact are problematic. Overall, findings of this study suggest that phone access and privacy issues may not only have a negative influence on the meeting of prisoners' information needs but potentially also their wellbeing, relationships, and rehabilitation.

Issues relating to prison visits also appear to have the potential to restrict prisoners' access to potentially valuable sources of information such as family, and evidence in this study suggests that such issues often stem from the distance prisoners' families lived from the prison. For example, one participant described visits as "costly and difficult to arrange", another explained, "no everybody's got the means and the funds", and another stated that he hadn't seen his parents in over two years due to issues organising transport. Such findings are in line with Condry's (2012) assertion, "Visiting prisons can be time-consuming, stressful, and expensive. Prisons are often located a long way from an offender's family home […] and might be poorly served by public transport" (p. 75). In further support of findings, in a recent prisoner survey in Scotland, over half of respondents reported visit-related issues and, of those who described issues, 72% attributed this to the distance of the prison from their home, 65% to a lack of transport, and 57% to the costs involved in getting to the prison (Carnie and Broderick, 2019, p. 3). Findings of this study also suggest issues relating to the duration and frequency of visits, which some participants felt did not allow them to properly maintain relationships with family. For example, one participant stated that he only accumulated a total of four full days of contact per year with his son via father-child visits, explaining, "It's difficult, just trying to condense all the information that you pick up in life and channel it to him in four days' worth." Some participants felt that the lack of privacy at visits could also negatively influence interactions with family. For example, one participant described visits as "noisy, loud, not very private, not very confidential" and another explained that he felt his family "don't feel as comfortable as what they should be" during visits due to the presence of prison officers. As with the previously discussed telephone issues, these issues around prison visits are significant given that visits were the third most common form of prisoners' contact with family (after telephone and letters) (Carnie and Broderick, 2019, p. 17). Again, looking to the importance of family support in helping prisoners to cope with their imprisonment and to

successfully reintegrate into society upon release is recognised (Condry, 2012; Gravett, 1999), we see another issue which may impede the maintenance of such vital relationships. Overall, these various issues relating to prison visits may not only negatively influence the meeting of prisoners' information needs, but also their relationships and rehabilitation.

There is also evidence in findings of this study that suggest the isolation of lock up times (i.e. during which prisoners are locked in their cells) can restrict prisoners' access to information. For example, one participant described being locked in his cell at night with limited access to information as "frustrating", and another stated that being isolated from others during these times could lead to overthinking, explaining, "It's quiet at night-time and that as well, so that probably is when you find yourself thinking just about stuff […] because everything's stopped", and this was recognised as potentially leading to a need for mental health information and/or support. Highlighting how potentially critical information sources may not be available during periods of lock up and isolation, one participant explained that access to Listeners (prisoners trained by the Samaritans to provide emotional support to their peers) and The Samaritan's phoneline was unavailable during lock up hours and he felt this was particularly problematic "because usually bodies are found in the morning, they've hung themselves or harmed themselves; that usually happens during the night." Supporting findings, existing work has recognised the potential for periods of isolation, such as lock up, to trigger feelings of stress and anxiety and potentially contribute to emotional and mental health issues (Canning and Buchanan, 2019; Kupers, 2001; Nacro, 2009). In their study of prisoners' information behaviour, Canning and Buchanan (2019) found that lock up times were "moments of significant emotional distress" during which "unmet emotional needs come to the fore" (p. 431). Given that unmet emotional needs are associated with increased aggression during incarceration (e.g. Roberton *et al.*, 2014, 2015; Velotti *et al.*, 2017) and unsuccessful rehabilitation (e.g. Day, 2009), and that suicide rates in Scottish prisons are more than 2.5 times higher than those of the general population (Fazel *et al.*, 2017), the issue of unmet emotional needs during periods of isolation is significant.

In summary, findings provide empirical evidence of and much needed insight into practical access issues which can have a negative influence on the meeting of prisoners' information needs. Findings demonstrate how prisoners' lack of internet access and dependency on gatekeepers to access information from this source can result in prisoners receiving insufficient and/or unsatisfactory information to meet needs and leave those studying university degrees feeling isolated and lonely as a result of being cut off from communication with other students online. Findings evidence issues relating to prison telephones which influence prisoners' communication with outside sources of information such as family, including the reportedly high cost of phone calls, limited number of telephones, monitoring and/or recording of calls by prison staff, and public location of telephones.

Findings also evidence issues relating to prison visits, including difficulties organising transport and travel costs which could make it difficult for prisoners' families to travel to the prison, and dissatisfaction with the duration and privacy of visits which left some prisoners feeling unable to properly maintain bonds with family. Findings indicate that nightly lock up is a particularly stressful time for prisoners and the inability to access mental health support services during lock up is recognised as problematic given that this period of isolation can lead to overthinking, potentially triggering and/or exacerbating mental health needs. Findings offer important insight into how source characteristics such as accessibility can influence the meeting of prisoners' information needs, linking to intervening variables proposed by Wilson's (1997), and present clear evidence of unmet needs stemming from practical access issues, supporting Chatman's (1999) assertion that the restrictive prison environment has a negative influence on the prisoners' information seeking. While these restrictions on prisoners' liberties may be necessary to maintain the security of the prison (and therefore, arguably appropriate to some extent), findings of this study highlight the detrimental impact of such issues on not only the meeting of prisoners' information needs, but also the potential negative consequences of this for prisoners' mental health, relationships, and rehabilitation.

5.4.2 Social and affective issues

Findings of this study also highlight a range of social and affective issues relating to stigma, self-esteem, and trust which can have a negative influence on the meeting of prisoners' information needs. These key themes are discussed in turn and in detail in this section.

In this chapter's earlier discussion of sensitive information needs (see section 5.2.1), the risk of stigma associated with such needs was highlighted as contributing to prisoners' reluctance to seek and/or share information on topics relating to mental health, relationships, and learning issues. Building upon this, findings suggest further stigma-related issues which can influence the meeting of prisoners' information needs. Some participants explained that the risk of being labelled a "grass" (i.e. informant) left them reluctant to seek information on mental health from prison staff on behalf of other prisoners (even when they were concerned about potential suicides). For example, one participant questioned, "when do you step in and say, 'This person needs help' because is that your responsibility? Or is that fair? Because there's a line there; what's grassing? What's not?", and another explained, "There's various people at the moment who say they are considering suicide, but I can't go to the officer because obviously then I'm ratting them out and I'm a grass". Supporting these findings, Canning and Buchanan (2019) found a similar reluctance among their participants to seek and/or share information pertaining to other prisoners from and/or with staff due to the risk of being viewed as an informant. Offering insight into how this perceived risk inhibits prisoners' information seeking, existing research

suggests that social norms in the prison deem acts which are viewed as "informing" or "grassing" as justification for bullying and/or violence (Connell and Farrington, 1996; Ireland and Archer, 1996). Findings of this study therefore present evidence which offers further insight into the influence of social norms in the small world of the prison, linking to Chatman (1999), and evidence further stigma-related issues which can negatively influence the meeting of prisoners' information needs.

Stigma-related issues of prejudice and discrimination evidence in findings also appear to have the potential to negatively influence the meeting of prisoners' information needs. For example, one participant stated that there were certain prison officers they wouldn't approach for information, explaining, "they have that attitude, that old attitude of, 'They're just fucking prisoners' or, you know, 'They belong here' kind of thing." Healthcare professionals were also viewed as often treating prisoners with prejudice and applying a drug-seeking stereotype to all prisoners. For example, one participant stated, "They think we're all chasing medication", and another, "they think everyone of us is at it for tablets." This appeared to leave some prisoners reluctant to interact with this source, with one participant explaining, "I don't bother going up there because you feel as if they see you as if you're just trying to chase it, trying to get drugs off of them." Evidencing potential issues relating to the discriminatory treatment of prisoners by potentially valuable information sources outside the prison, one participant explained, "as soon as you mention you're at HMP Shotts, you're at a disadvantage with any agency […] you're disadvantaged as soon as you're known as a prisoner in my view." Goffman (1961) explains that prisoners are a "stigmatized" group and thus liable to be discredited and suffer from discrimination (p. 71), and in the information context, Wilson (1997) explains that personal characteristics, such as negative attitudes, can create "interpersonal problems" which negatively influence interactions with sources of information (pp. 559-560). Findings of this study present valuable evidence and insight into the negative impact of stigma-related issues such as prejudiced attitudes and discriminatory treatment on the meeting of prisoners' information needs.

Low self-esteem has long been recognised as a common characteristic of the general prisoner population (e.g. Goffman, 1961; Gravett, 1999; Liebling, 1994) and findings of this study suggest that that, in addition to stemming from stigma-related issues such as negative portrayals of criminals in the media, prisoners' low self-esteem may also stem from their dependency on others for access to information (and consequently, influence the meeting of their information needs). Several participants described feeling like a "pest" due to their depending on prison staff for information and this appeared to influence how often they were willing to seek information from this source. For example, discussing teachers, one participant explained, "Sometimes because I've asked that much, if I do need something I'll no ask them for a couple of days." Some participants, however, recognised that prisoners often had little choice but to depend on staff for access to information (due to

gatekeeping roles and access issues). For example, discussing prison officers, one participant explained that when he first came to prison, "it felt as if I was just asking and asking and asking […] but the stuff that I'm asking for is what I need and I can only go to them for it." Goffman (1961) explains that prisoners can feel that they are "inferior, weak, blameworthy, and guilty" (p. 18) as a result of the "submissive" role they must adopt under the authority of staff upon whom they are dependant (p. 45). Findings of this study highlight the negative impact of this dependency on prisoners' self-esteem and, looking to the influence of self-efficacy on information behaviour proposed in Wilson's (1997) Revised General Model of Information Behaviour, findings also offer insight into how such feelings can negatively influence prisoners' motivation to seek information to address needs.

Participants' discussions also suggest that self-esteem issues stemming from prisoners' dependency on family can leave them reluctant to seek information from this potentially valuable source due to feelings that they are "a burden" and "an inconvenience" to their families. One participant explained that he wouldn't necessarily talk to his family about "down days […] because that will have them worried when they don't need to worry", while another stated that he would act happy during visits even if he was not because "the last thing you want is to put the onus on your family". One participant explained that he felt he was not only the one suffering as result of his imprisonment because his parents were "suffering as well" and as a result of this, tried to keep conversations with them as "normal" as possible, explaining, "they don't need a reminder that I'm in here". Such behaviour suggest that prisoners may hide and/or mask emotional issues from family due to feelings of guilt, and as such, findings present evidence of prisoners engaging in the self-protective information behaviours, *secrecy* and *deception,* which are key indicators of information poverty (Chatman, 1996). There is also evidence of prisoners weighing up the consequences of seeking information from family against benefits (i.e. the benefits of attaining emotional support and/or information against the potential worry their family will feel knowing of such issues), linking to concepts of risk/reward in Wilson's (1997) model. Importantly, it is noted that the statements made by participants suggest that these self-protective behaviours are employed by prisoners not only to shield themselves from potential negative consequences of revealing emotional needs to family (e.g. feelings of guilt), but also in attempts to shield family members from the distress of knowing their loved one is suffering in prison.

There is also evidence in findings of trust issues which can have a negative influence on the meeting of prisoners' information needs. Participants' discussions suggests that prisoners may be reluctant to seek and/or share information (particularly on sensitive topics) with prison officers due to the risk that it might be shared with other prisoners, prison staff, or even sold to media outlets. For example, one participant stated, "there's plenty of officers where if they had information about you, they would sell, people would sell the story to a newspaper", while another felt unable to discuss his mental health

needs with prison officers because he feared they would "let it out in the open, they would let people know about it". Findings suggest that prison staff are viewed as equally distrustful of prisoners; e.g. one participant arguing that prison staff were "trained to spot hidden agendas in trivial matters which does put boundaries up", and another summarised the prisoner-staff situation as, "screws versus cons at the end of the day." Goffman (1961) explains that prisoners' sense of inferiority under authority figures in the prison breeds distrust between prisoners and prison staff (p. 18), and Stevens (1994) states that 'us' and 'them' attitudes are often more pronounced in higher security establishments (p. 33), such as the prison in this study. It was noted that confidentiality concerns also extended to addiction support services, which were viewed by some participants as not providing the anonymity they promised, leaving some prisoners who might benefit from accessing this service, unwilling to participate. Distrust also appeared to extend to the prison establishment, with prisoners questioning the motives behind initiatives run by the prison; e.g. asking questions such as "is it a feel-good factor for them, or is it an actual genuine positive beneficial project for us?". Burt (1977) explains, "There is a tendency for inmates to suspect ulterior motives when new programs, etc., are initiated because the inmates feel vulnerable" (p. 32), and findings of this study suggest that this sense of vulnerability may stem partially from trust issues and the risk of sensitive information shared at such projects being shared and/or exploited by others. Chatman (1999) explains that "trust and believability" are the primary conditions for the seeking and/or sharing of information in small worlds (p. 215), and that in an information impoverished world, the more personal information is, the more likely benefits of disclosure will be weighed against potential risks (1996, p. 203). Findings of this study support such assertions by demonstrating how distrust inhibits the seeking and/or sharing of information in the small world of the prison, thereby negatively influencing the meeting of prisoners' information needs, while highlighting the prevalence of trust issues in prisons as noted in previous work (e.g. Crewe and Bennett, 2012; Goffman, 1961; Sykes, 1958; Sabo *et al*., 2001).

Interview discussions also highlight how distrust of other prisoners can negatively influence the meeting of prisoners' information needs. Several participants highlighted the prevalence of "false" personas within the prisoner community and explained that other prisoners were often viewed as untrustworthy, despite appearances, and liable to pass on information shared with them in confidence. For example, one participant felt that sharing personal information with other prisoners (even those considered friends) left prisoners "vulnerable", explaining, "some people tell information without thinking. [...] they don't realise, 'You don't repeat what has just been said'; you shouldn't have to say that." It is acknowledged that prisoners may find it more difficult to establish friendships built on trust with other prisoners as a result of feeling unable to share information, particularly that of a personal nature; given that the formation of such bonds is often dependent on both parties holding

potentially discrediting information about the other (Goffman, 1963, p. 108). Potentially compounding trust issues, also evident in findings is the prevalence of misinformation and disinformation in the prisoner information network. For example, several participants explained that when information about events was passed through this network by word of mouth, details were often "embellished" by prisoners to make events sound "more extravagant or more sensational" and this was attributed to some prisoners seeking to "cause disruption" and to "stir things up […] to change the monotony of prison life". This supports Canning and Buchanan's (2019) finding that prisoner networks may be "effective modes of communication within the prison" but also "prone to manipulation and abuse, compounding issues of trust" (pp. 430-431). It is recognised that issues of misinformation and disinformation may be common in contexts where communication is often interpersonal and prone to misunderstanding and manipulation. While attention has been paid to the issue of fake news, particularly in relation the context of social media (e.g. Karlova and Fisher, 2013), findings of this study demonstrate ongoing issues of misinformation and disinformation in the context of the prison in which internet access is not possible and where potential negative consequences of such information for individuals may be much higher (e.g. leading to bullying and/or violence) than for the average person engaging with mis and/or disinformation via social media channels.

In summary, findings evidence a range of *social and affective* issues which can negatively influence the meeting of prisoners' information needs. Stigma-related issues relating to the risk of ridicule for showing weakness by seeking and/or sharing information on sensitive subjects, the risk of bullying as a result of being labelled a "grass" or informant, and issues of prejudice and discriminatory treatment by prison staff and external agencies appear to negatively influence prisoners' interactions with potentially valuable sources of information. Self-esteem issues, partially stemming from prisoners' dependency on prison staff and family, appears to leave some prisoners reluctant to reveal needs to and/or seek information from these sources, instead often hiding or masking issues (particularly those relating to mental health). Also evident in findings was the distrust, generally considered reciprocal, that many prisoners felt towards other prisoners, prison staff, and services offered by the prison, which appeared to often lead to prisoners weighing up the risk of information shared in confidence being passed and/or exploited by others against potential benefits of obtaining information, further contributing to prisoners' reluctance to reveal information needs to others, particularly those of a sensitive nature. Findings present evidence of activating mechanisms, relating to concepts of self-efficacy and risk/reward, influencing prisoners' motivation to seek information, and intervening variables, such as personal characteristics and negative attitudes, influencing prisoners' use of sources; linking to Wilson's (1997) Revised General Model of Information Behaviour. Overall, findings suggest a degree of risk is associated with interpersonal information interactions, and evidence

indicates that prisoners often engage in self-protective behaviours in response to restrictive social norms and perceptions of low self-worth; corresponding with Chatman's (1996; 1999) concepts of secrecy and deception (importantly, indicating information poverty) and offering further insight into the negative influence of small world living on the meeting of prisoners' information needs.

5.4.3 Stress/coping issues

Findings of this study present evidence of unrecognised and/or poorly understood information needs relating to sensitive topics, such as mental health and relationships, and suggest that in situations where information needs are unrecognised and/or poorly understood and even in some situations where needs are well understood, the coping strategies employed by prisoners in response to feelings of uncertainty and stress can negatively influence recognition, comprehension, and action in response to information needs. Evidence relating to this key finding is discussed in this section.

Evident in findings of this study are unrecognised and/or poorly understood information needs of a sensitive nature, and this can be seen in interview discussions where participants often alluded to information needs relating to mental health (e.g. acknowledging poor mental health) and relationships (e.g. acknowledging issues communicating with children at visits) but did not explicitly identify these as information needs. Canning and Buchanan's (2019) study of prisoners' information behaviours found similar evidence of sensitive information needs (e.g. relating to emotional topics and coping with imprisonment) which were often alluded to in discussions but not always described outrightly as needs by participants and this was attributed to the possibility that such needs were "not yet fully formed or understood as information needs" (p. 429). Looking at reasons why information needs may be unrecognised and/or poorly understood, Taylor's (1968) question-negotiation theory offers some insight, suggesting that individuals may be aware of the "vague sort of dissatisfaction" resulting from visceral (unrecognised) needs but not understand that information can help to resolve such feelings, or alternatively, individuals may possess a "mental description of ill-defined area of indecision" resulting from conscious (recognised) needs but not know how to address this due to a lack of understanding (p. 182). Findings of this study offer valuable further evidence and insight this area, suggesting that the coping strategies employed by prisoners in response to feelings of stress can inhibit recognition of information needs and action in response to recognised needs; evidencing the influence of stress/coping on information behaviour as incorporated in Wilson's (1997) model.

Lazarus and Folkman (1984) describe information seeking as "problem-focused coping" (i.e. acting to relieve problems) (p. 44). In lieu of seeking information to resolve information needs, participants in this study often described "emotion-focused coping" (i.e. suppression, avoidance, and distraction) through which they attempted to lessen the emotional distress associated with issues without

resolving them (p. 159). This can be seen in participants' discussions around the various ways they coped with mental health issues, including coping with the stress associated with confronting mental health needs via suppression (i.e. refusing to confront the reality of such issues). Offering insight into how this can negatively influence the meeting of mental health needs, one participant felt that some prisoners did not receive the mental health support they required, "be it either through fear of not talking about, not willing to… I mean it's not so much not willing to talk about it, it's the idea that accepting it, that it's real is far more frightening." Previous research on prisoners' help-seeking in response to mental health problems presents similar evidence of a general reluctance among male prisoners to seek help for mental health issues, often due to the fear of self-knowledge which could result from formal diagnosis of a mental illness (Howerton *et al.*, 2007). As previously discussed, information needs relating to topics such as mental health appear to be further sensitised in the hypermasculine prison context and this reluctance to acknowledge mental health issues may not only stem from attempts to protect against *external* threats to prisoners' wellbeing (e.g. stigma), but also to protect against *internal* psychological distress (e.g. recognition of an issue which suggests a flaw in their sense of masculinity). Drawing on Taylor's (1968) question-negotiation theory, it is likely that such needs exist at a 'conscious' level (i.e. recognised but not fully understood) but remain unexpressed due to efforts to suppress the need. Overall, findings of this study suggest that coping strategies based on suppression of stress-inducing needs can negatively influence the meeting of prisoners' information needs, by hindering formal recognition and understanding of needs and by also inhibiting action (e.g. information seeking) in response to such needs.

There is also evidence in findings of prisoners coping with the stress of unmet needs relating to family via avoidance strategies which can negatively influence the meeting of such needs. For example, one participant explained that prisoners might avoid thinking about family in response to the stress of their physical separation; "Anybody up the hall would go off their nut if you talk about family. […] It's because you cannae get to see them that much […] they're trying to put that out their mind so they're no worrying about it". Some participants in this study also described physical avoidance of family. For example, one participant stated that he did not accept visits from his children, explaining, "I don't want to put my child through a situation where when it's time to leave they get upset". This reluctance to put children in an upsetting situation by having them attend visits may partially explain why, in a prisoner recent survey, 63% of prisoners in Scotland reported that they did not receive visits from their children (Carnie and Broderick, 2019, p. 19). Findings of this study suggest that anxiety is often associated with unmet needs relating to family (e.g. their daily lives, wellbeing, etc.) and suggest that prisoners cope with these uncertainties by putting family out of sight and/or mind as opposed to attempting to seek information to resolve associated needs, which may be difficult to address due to

various barriers impacting communication with family (e.g. phone, visit, and self-esteem issues as previously discussed). This type of coping demonstrates prisoners responding to stressful situations via 'blunting' information behaviours (i.e. avoiding or distracting themselves from potentially threatening information) as opposed to 'monitoring' (i.e. attending to it) (Miller 1979; Miller and Mangan, 1983). In addition to this type of coping negatively influencing action in response to recognised needs, it is also possible that associated needs at early visceral stages (e.g. the need for information on how to communicate with children during visits to maintain healthy and strong bonds) may also remain unrecognised and consequently, unmet. Given the importance of family support in helping prisoners to cope with imprisonment and successfully reintegrate into society upon release (Condry, 2012; Gravett, 1999), avoidance coping may not only inhibit recognition of information needs relating to family, but also potentially damage relationships and consequently, hinder prisoners' rehabilitation.

Another sub-theme which emerged from analysis of findings was the tendency for prisoners to cope with the uncertainty and stress associated with unmet needs relating to past and future situations via similar avoidance strategies. For example, one participant explained that to minimise stress, he tried to "concentrate on the here and now" as opposed to thinking about the past or future. Reflecting this, Chatman's (1999) study of 'life in the round' found that prisoners tend to focus on the daily issues they feel they can exert some control over because of their "sense of helplessness" regarding past and future issues (p. 215). Similarly, Zamble and Porporino's (1988) study of coping in prisons found that prisoners tended to focus on the present because thinking about future or past events could trigger feelings of stress and uncertainty (p. 122). Again, findings of this study present evidence of prisoners coping with stressful situations via 'blunting' methods based on the avoidance of potentially threatening information as opposed to 'monitoring' and engaging with it to resolve uncertainties. Importantly, it is noted that this may inhibit the meeting of information needs relating to rehabilitation, as this fixation on the present may mean that needs relating to prisoners' past situations (e.g. dealing with trauma associated with their crime) and future situations (e.g. preparing to reintegrate into society) remain unrecognised and/or unactioned. Overall, findings support existing work which suggests that, in response to the deprivational effect of prison life and limitations on expression imposed by prison culture, prisoners often adopt maladaptive coping strategies which can lead to them to avoiding information (Campbell, 2005; Chatman, 1999; Clemmer, 1940; Dye, 2010; Goffman, 1961; Liebling, 2012; Sykes, 1958; Zamble and Porporino, 1988), but also offer important further evidence and insight in this area.

Evidencing another type of coping which can negatively influence the meeting of such needs, findings suggest that prisoners may also attempt to cope with the stress associated with unmet needs on a

range of topics (i.e. confronting criminal behaviour, separation from family, and emotional issues) by engaging in drug abuse as a form of distraction. Several participants described drug abuse as a common coping strategy due to the potential for drug-induced states to facilitate "escapism" (i.e. psychological withdrawal) from stress-inducing issues and to suppress emotions. For example, one participant stated that drug abuse helped him to cope with unresolved anger issues, explaining, "I had a heavy rage in me, and I was at snapping point, so I started taking drugs and it kind of helped to be honest. It just kind of switches off your emotions." This may partially explain why, in a recent prisoner survey, 39% of prisoners in Scotland reported that they had used illegal drugs in prison at some point; a figure which has remained steady since 2015 (Carnie and Broderick, 2019, p. 2). However, some participants recognised that this was not a constructive way of coping with issues and only deferred dealing with problems. For example, one participant explained, "people think to themselves, 'If I go and take drugs then my problems will go away' but it's no true; they're still going to be there, it's just it might help them forget about them", and another alluded to the potential for coping via drug abuse to contribute towards additional addiction issues in the long-term, explaining, "that wanting to feel good ends up becoming a need". Further highlighting the detrimental impact of drug abuse, one participant felt that prisoners with mental health issues might not engage with mental health support programmes because they were "high as a kite", suggesting cognitive states inhibiting awareness of needs and the relevance of sources to their situation, while another felt that the psychological damage resulting of long-term drug abuse could lead to prisoners "not understanding their needs", suggesting recognition issues. Findings therefore offer valuable insight into the potential for drug-induced states to offer short-term 'escapism' from feelings of stress but to also result in greater levels of future stress as problems remain chronic and may be exacerbated by additional addiction issues.

Prisoners also appear to engage in other coping strategies (which not inherently considered maladaptive) in response to the general stress of imprisonment and which findings suggest can negatively influence recognition of information needs and action in response to recognised needs. For example, participants in this study discussed engaging in educational and cultural activities as a way of wresting positive value from the negative experience of their imprisonment while also distracting themselves from potentially distressing thoughts. For example, educational courses were described as giving prisoners something to "focus" on and helped prisoners to pass time productively while also having long-term goals, such as qualifications, to work towards. Physical exercise was described as "mentally and physically good for you", offering prisoners "routine" and a "fun" way to pass time. Television was described as a "distraction" which could help prisoners to cope with the isolation of lock up times, with one participant explaining that watching television helped him to "forget for a few hours" about his depression. Previous work has recognised the potential for engagement with cultural

activities to serve as a valuable distraction from the general stress of imprisonment (Bowker, 1977; Goffman, 1961; Johnson and Dobrzanska, 2005; Nacro, 2009; Zamble and Porporino, 1988), and building upon this, findings of this study also highlight the value of engagement with educational activities in this area. However, given that individuals may divert attention to non-information-seeking activities when confronted with the risk of being exposed to information that which could result in stress and/or stigma (Savolainen, 2016), prisoners' engagement in cultural and educational activities may not only offer distraction from the general stress of imprisonment but also facilitate suppression of information needs, which might trigger and/or exacerbate existing feelings of uncertainty and stress. As such, while engagement in such activities can offer distraction from stressful aspects of imprisonment (e.g. separation from family), engagement with such activities may at times mean that sensitive information needs (e.g. relating to wellbeing of family) remain unrecognised and unmet.

In summary, findings present evidence of unrecognised and/or poorly understood information needs on sensitive topics, such as mental health and relationships, and suggest that in situations where information needs are unrecognised and/or poorly understood and even in some situations where needs are well understood, the coping strategies employed by prisoners in response to feelings of uncertainty and stress can negatively influence recognition, comprehension, and action in response to information needs. There is evidence of prisoners employing a range of coping strategies which can negative influence the meeting of their information needs, including suppressing needs to avoid confronting issues which could cause a sense of personal inadequacy and/or weakness (e.g. poor mental health), keeping family out of sight and mind to avoid feelings of uncertainty and stress stemming from unmet relationship needs, focusing on the present to avoid feelings of uncertainty and stress stemming from unmet needs relating to their past and/or future situations, and engaging in drug abuse to 'escape' problems as opposed to seeking to resolve them. Findings also suggest that more constructive strategies for coping with the general stress of imprisonment (i.e. engaging in educational and cultural activities) may also inadvertently suppress recognition of prisoners' information needs. Findings offer insight in the specific context of imprisonment of the influence of stress/coping strategies on information behaviour as incorporated in Wilson's (1997) Revised General Model of Information Behaviour. Findings also demonstrate how coping strategies based on suppression, avoidance, and distraction can influence recognition and comprehension of needs, offering insight into the influence of stress/coping on early stage visceral and conscious levels of need as proposed in Taylor's (1968) question-negotiation theory. Findings also offer important insight into the consequences of maladaptive coping strategies beyond the meeting of information needs, including potential detriment to prisoners' mental health, relationships with family, and rehabilitation.

5.4.4 Overview of discussion relating to issues

In summary, findings evidence a range of issues which can negatively influence the meeting of prisoners' information needs. There is evidence of issues inhibiting *access* to information, including prisoners' lack of internet access, issues relating to prison telephones (i.e. cost, limited availability, lack of privacy), issues relating to visits (i.e. cost, transport availability, short duration, lack of privacy), and limited access to information sources during the isolation of lock up times. Findings also evidence *social and affective* issues which inhibit prisoners' information seeking, including stigma-related issues such as the risk of ridicule and bullying associated with deviating from social norms, issues relating to prejudice and discrimination, self-esteem issues partially stemming from prisoners' dependency on others, and distrust of other prisoners, prison staff, and the wider prison establishment which could leave prisoners reluctant to seek and/or share information due to confidentiality concerns. Findings also present evidence of *stress/coping* issues which can contribute to unrecognised and/or poorly understood information needs on sensitive topics such as mental health, including prisoners' tendency to employ coping strategies based on suppression, avoidance, and distraction from stress-inducing issues and associated information. Importantly, findings of this study highlight the potential for identified issues to not only negatively influence the meeting of prisoners' information needs, but also potential negative impacts for prisoners' mental health, relationships with family, and rehabilitation.

Looking to the theoretical framework of this study, findings evidence prisoners weighing up benefits of obtaining information against associated risks before acting upon needs, demonstrating the influence of risk/reward evaluations on information behaviour as incorporated in Wilson's (1997) Revised General Model of Information Behaviour in the prison context. Findings also provide further insight into the influence of stress/coping on information behaviour as incorporated in Wilson's (1997) model, demonstrating how prisoners' coping strategies can influence recognition of information needs and action in response to recognised needs. There is also evidence of coping strategies based on suppression, avoidance, and distraction influencing recognition and comprehension of information needs in the prison context, offering new insight into the relationship between stress/coping and early stage visceral and/or conscious levels of need in Taylor's (1968) question-negotiation theory. Findings suggest that a degree of risk is inherent in interpersonal information interactions in the prison context, with prisoners often engaging in self-protective information behaviours (such as secrecy and deception) in response to restrictive social norms and perceptions of low self-worth, supporting Chatman's (1996; 1999) theories of information poverty and life in the round and presenting much needed additional evidence of information poverty in the prison context and insight into the negative influence of small world living on prisoners' information seeking behaviour.

5.5 Chapter summary

In summary, findings present significant empirical data which evidences a broad range of prisoners' information needs and offers important novel insight in several areas; including the identification of sensitive information needs and factors contributing to the sensitivity of these in the hypermasculine prison context, the complex relationships which can exist between prisoners' information needs, and potentially severe impact of unmet needs (particularly upon prisoners' mental health). Findings also present substantial empirical data evidencing the range of information sources available to prisoners and offering depth of insight into factors which influence's prisoners' use of information sources; including reasons for prisoners general preference for interpersonal sources, reasons why information informed by lived experienced is valued in the prisoner context, and reasons why prisoners are selective of the information sources they use when seeking and/or sharing sensitive information. Findings also present significant empirical data evidencing a number of issues which can negatively influence the meeting of prisoners' information needs; including issues which inhibit prisoners' access to information (i.e. lack of internet, phone and visit-related issues, and isolation of lock up times), social and affective issues (i.e. issues relating to stigma, self-esteem, and trust) which negatively influence prisoners' ability and/or willingness to seek information, and stress/coping issues which can negatively influence recognition of information needs and action in response to recognised needs. Overall, evidence suggests that prisoners' information needs often remain unmet and highlights a range of negative outcomes associated with unmet needs, including potential detriment to prisoners' mental health, relationships, and rehabilitation.

Chapter 6: Conclusions and recommendations

6.1 Introduction

This chapter presents conclusions and recommendations of this research. First, a summary of findings is presented to address the research questions of the study (*section 6.2*). Then key contributions of this study are outlined (*section 6.3*) and limitations of the research are discussed (*section 6.4*). A list of recommendations for future research is then presented (*section 6.5*) followed by recommendations for practical action/policy/change (*section 6.6*). The researcher then reflects on their PhD journey (*section 6.7*), with final conclusions presented at the end of this chapter (*section 6.8*).

6.2 Summary of research findings

In response to previous research indicating that prisoners' information needs are often unmet (e.g. Canning and Buchanan, 2019; Chatman, 1999; Nacro, 2009; Stevens, 1994), this study sought to explore the information needs and seeking behaviours of adult male prisoners to better understand the issues faced by this group when attempting to address information needs, to identify potential methods of support and consequently, improve prisoners' chances of successful rehabilitation. To achieve this, the study was designed to answer four research questions which are returned to below.

6.2.1 What are the information needs of prisoners?

Findings offer valuable insight into a wide range of prisoners' information needs including (from most to least frequently discussed by participants) mental health, relationships, the prison regime, education, rehabilitation, reintegration, physical health, law, and recreational interests. This study presents evidence which suggests that the sensitivity of information needs relating to mental health, relationships, and learning issues is heightened in the prison context and this is attributed to the risk of stigma associated with deviating from masculine social norms but also the risk of prisoners being assigned additional rehabilitative courses after revealing sensitive needs to staff. In response, prisoners weigh up the benefits of seeking to address such needs against the risks associated with doing so and the typical outcome of such risk-reward evaluations appears to often be inaction. Also apparent in findings is evidence which offers insight into the complexity of prisoners' information needs, including the potential for the uncertainty associated with complex interwoven needs which form part of a larger goal (e.g. preparation for release) to trigger and/or exacerbate negative emotional states (e.g. anxiety) which are detrimental to prisoners' mental health and rehabilitation.

There is also evidence which demonstrates how the task of addressing information needs can be complicated by the existence of related needs which must be first resolved, and which can have an overwhelming effect on individuals, resulting in lower levels of motivation to seek information to address such needs. Findings also offer insight into the detrimental impact of unmet information needs in the prison context, including the potential for unmet needs to contribute to emotional and behavioural issues which can negatively influence prisoners' sentence progression and rehabilitation, exacerbate negative emotional states during already stressful stages of imprisonment, and accumulate and detrimentally impact prisoners' mental health and coping abilities in the long term**.** Notably, findings suggest that unmet information needs relating to mental health can contribute to significant negative outcomes such as suicide, highlighting the importance of ensuring prisoners' information needs are met, particularly those relating to mental health, despite the practical and procedural restrictions of prison life.

Returning to guiding concepts, findings present evidence of the influence of stress/coping strategies, risk/reward evaluations, and social learning behaviours on prisoners' information behaviour, contributing to understanding of the influence of *activating mechanisms* as presented in Wilson's (1997) Revised General Model of Information Behaviour in the prison context. Findings also provide evidence of the *compromising* of information needs to meet the requirements of an information source or system as proposed in Taylor's (1968) question-negotiation theory and offer further insight in the interpersonal (person-to-person) context, with prisoners engaging in indirect discussion of sensitive information needs with others to minimise associated social risks. There is also evidence of prisoners engaging in self-protective information behaviours, such as *secrecy* and *deception,* in response to risks associated with revealing and/or seeking to address information needs which are in contravention to the social norms of the prison, linking to concepts in Chatman's (1996; 1999) information poverty and small world theories and contributing to understanding of these in the hypermasculine context of all-male prisons.

6.2.2 What sources of information do prisoners use and why?

Findings provide both breadth and depth of understanding in relation to the information sources available to prisoners, including other prisoners, prison officers, healthcare professionals, family, teachers, media (i.e. television, radio, newspapers, and magazines), solicitors, learning centre resources (i.e. legal texts, encyclopaedia software, and library books), friends (outside of the prison), printed prison resources (i.e. posters and the prison induction booklet), social workers, Listeners (prisoners trained by the Samaritans to provide emotional support to their peers), the prison chaplain, the prison librarian, addiction support services, and physical training instructors.

This study also presents evidence which offers specific insight into factors influencing engagement with sources. For example, prisoners appear to possess a general preference for interpersonal sources and this is attributed to issues associated with non-interpersonal sources (which are viewed as providing outdated or limited information and/or being inaccessible to individuals with literacy issues), and benefits associated with seeking information by proxy through interpersonal sources (including benefits for recognition and/or understanding of needs and enabling access to otherwise inaccessible sources such as the internet). Also evident were the benefits arising from communication with family (especially mothers) which appeared to help prisoners not only obtain information on sensitive topics, but also relieve their negative emotional states (e.g. loneliness), help maintain vital relationships, and even support prisoners' rehabilitation. Findings also suggest that prisoners view information obtained from other prisoners who have lived experience of imprisonment as having greater credibility than that obtained from prison staff, and information informed by lived experience appears to not only have the potential to help prisoners feel more optimistic about their ability to cope with imprisonment, but also aid in the formation of friendships which can help prisoners to cope with prison life. Evidence presented in this study also indicates that prisoners prefer trusted interpersonal sources (i.e. family or prisoner friends) and/or non-interpersonal sources which offer privacy (i.e. television) when seeking information to address sensitive needs; largely stemming from considerations relating to the perceived risks of disclosure and hypermasculine social norms in the male prisoner environment.

Returning again to guiding concepts, findings evidence source characteristics which influence prisoners' use of information sources (e.g. trust, privacy, and accessibility), and demonstrate prisoners engaging in risk/reward evaluations and social learning behaviours which influence their motivation to seek information; linking to the influence of *activating mechanisms* and *intervening variables* as presented in Wilson's (1997) Revised General Model of Information Behaviour and contributing to the current level of understanding of these in the context of prisoners' information seeking. Findings also present evidence of prisoners attributing value to sources which can provide information informed by lived experience due to the perception that such information is more useful and credible than that which can be obtained from prison staff; linking to into *insider/outsider* concepts in Chatman's (1996; 1999) information poverty and small world theories and contributing to the currently level of understanding of these in the prison context.

6.2.3 What issues influence the meeting of prisoners' information needs?

Evident in findings of this study are a range of issues which can negatively influence the meeting of prisoners' information needs. There is evidence of issues inhibiting *access* to information, including

prisoners' lack of internet access, issues relating to prison telephones (i.e. cost, limited availability, lack of privacy), issues relating to visits (i.e. cost, transport availability, short duration, lack of privacy), and limited access to information sources during the isolation of lock up times. Findings also evidence *social and affective* issues which inhibit prisoners' information seeking, including stigma-related issues such as the risk of ridicule and bullying associated with deviating from social norms, issues relating to prejudice and discrimination, self-esteem issues partially stemming from prisoners' dependency on others, and distrust of other prisoners, prison staff, and the wider prison establishment which could leave prisoners reluctant to seek and/or share information due to confidentiality concerns. Findings also present evidence of *stress/coping* issues which can contribute to unrecognised and/or poorly understood information needs on sensitive topics such as mental health, including prisoners' tendency to employ coping strategies based on suppression, avoidance, and distraction from stress-inducing issues and associated information. Importantly, findings of this study highlight the potential for identified issues to not only negatively influence the meeting of prisoners' information needs, but also potential negative impacts for prisoners' mental health, relationships with family, and rehabilitation.

Again, returning to guiding concepts, findings evidence prisoners weighing up benefits of obtaining information against associated risks before acting upon needs, demonstrating the influence of risk/reward evaluations on information behaviour as incorporated in Wilson's (1997) Revised General Model of Information Behaviour in the prison context. Findings also provide further insight into the influence of stress/coping on information behaviour as incorporated in Wilson's (1997) model, demonstrating how prisoners' coping strategies can influence recognition of information needs and action in response to recognised needs. There is also evidence of coping strategies based on suppression, avoidance, and distraction influencing recognition and comprehension of information needs in the prison context, offering new insight into the relationship between stress/coping and early stage visceral and/or conscious levels of need in Taylor's (1968) question-negotiation theory. Findings suggest that a degree of risk is inherent in interpersonal information interactions in the prison context, with prisoners often engaging in self-protective information behaviours (such as secrecy and deception) in response to restrictive social norms and perceptions of low self-worth, supporting Chatman's (1996; 1999) theories of information poverty and life in the round and presenting much needed additional evidence of information poverty in the prison context and insight into the negative influence of small world living on prisoners' information seeking behaviour.

6.2.4 How can prisoners be supported to address their information needs?

Findings of this study suggest that prisoners' information needs are often unmet, particularly those of a sensitive nature relating to mental health and relationships, and this appears to stem in part from

recognition issues and/or access and behavioural barriers which hinder prisoners' information seeking. The problem of unmet sensitive information needs in the prison context is significant, with findings of this study highlighting the potential for unmet sensitive needs to negatively influence prisoners' coping abilities and rehabilitation by triggering and/or exacerbating existing mental health issues (and even contributing to potentially severe consequences such as suicide). As such, there is a need to identify appropriate methods to support prisoners to recognise, act upon, and address their information needs; particularly those of a sensitive nature. This is where this study proposes engagement with cultural activity in the prison context as a potential intervention/solution.

Cultural activities designed to encourage recognition and discussion of difficult issues have been used in a variety of non-prison settings, including bibliotherapeutic reading groups in the parole context (Waxler, 2008). While cultural activities are already available in many prisons, this is often for recreational purposes to support prisoners' general wellbeing (Billington and Robinson, 2012; Browne and Rhodes, 2011) and as a means of achieving rehabilitative outcomes (e.g. improved literacy skills) via non-confrontational approaches (Anderson *et al.*, 2011; Bilby *et al.*, 2013; Turvey, 2013). Importantly, for the purposes of this study, there is evidence in existing work that engagement with cultural activity in the prison context encourages self-reflection amongst participants (Bilby *et al.,* 2013; Billington and Robinson, 2012; Browne and Rhodes, 2011; Turvey, 2013), which may prompt recognition of new information needs and/or better understanding of existing needs. For example, discussing the value of reading groups, Turvey (2013) explains that prisoners may come to better understand their own situations by reading about those of fictional characters. It seems plausible that, in engaging in self-reflective practises and coming to better understand their own situation, prisoners may also come to recognise and better understand their information needs; including those previously repressed because they are not well understood, viewed as insignificant, appear overwhelming, and/or are considered taboo. New needs could also be triggered as a result of this self-reflection.

Cultural activities are attractive to explore as an intervention for supporting prisoners to recognise and articulate sensitive information needs for several reasons. For example, the private experience of self-reflection enables greater self-understanding without the need to disclose thoughts to others (Billington and Robinson, 2012). The non-judgemental atmosphere of cultural activities can also encourage self-expression among participants (Anderson *et al.,* 2011; Hurry *et al.,* 2014), potentially also encouraging articulation of needs to others (and thereby, increasingly the likelihood of needs being met). While cultural activities can be useful in engaging prisoners who would normally be disengaged from formal prison programmes (Hurry *et al.,* 2014; Turvey, 2013), it is recognised that prisoner disengagement can also extend to non-formal interventions (Burt, 1977). There is also the question of what happens following engagement, as prisoners need to be supported not only to

recognise and understand information needs but also to address them. This is where the prison library, as the cultural hub of the prison and neutral space, has the potential to play a key partnership role.

Stevens and Usherwood (1995) explain that the prison library plays a vital role in providing valuable follow-up information to prisoners following their engagement with rehabilitation courses (during which they may gain new perspectives on their criminal behaviour). There is potential for the prison library to expand upon this role by acting as a suitable space in which to deliver cultural activities and as a source of ongoing support following engagement (i.e. helping prisoners to address information needs which are recognised and/or triggered as a result of engagement with cultural activity, and further supporting the rehabilitative journey of reflection, understanding, and development). The prison library is considered a suitable setting in which to explore the role of cultural activities in supporting prisoners to recognise and address sensitive information needs given that it is often the only specifically designated "cultural space" within prisons and is the standard setting for activities such as reading and creative writing groups (Cramard, 2011, pp. 551-555). The prison library also offers an atmosphere which is considered more conducive to engagement than more formal prison settings (Bowe, 2011; Lehmann and Locke, 2006; Nason, 1981), and is recognised as having the potential to support information needs triggered and/or recognised as a result of engagement with cultural activities due to its widely recognised role as an information-provider (e.g. Bajić, 2015; Burt, 1977; Campbell, 2005; Canning and Buchanan, 2019; Emasealu and Popoola, 2016; Eze, 2014; Omagbemi and Odunewu, 2008; Rafedzi and Abrizah, 2014; Stevens and Usherwood, 1995; Tarzaan *et al.* 2015; Sambo *et al.* 2017). However, given the lack of existing research in this area, further research is required to ascertain the benefits and feasibility of delivering cultural interventions in the prison library as a means of supporting recognition, understanding, and the meeting of prisoners' information needs (recommendations for future research are further discussed in section 6.5).

The researcher published a chapter based on the content of this section in a recent volume (no. 49) of Emerald's 'Advances in Librarianship' series which explores the roles and practises of libraries in prisons (see Canning and Buchanan, 2021); this publication presents a more in-depth discussion of the rehabilitative role of the prison library and it is recommended that the reader refer to this chapter for further detail and discussion of the potential support role the prison library can play in assisting prisoners' to address sensitive information needs (other chapters may also be of interest to the reader). Discussion in the thesis on this topic has been limited time constraints which did not permit a full exploration (involving practical fieldwork investigations) in this area.

6.3 Key contributions

This study has made several significant contributions to the literature on prisoners' information needs and seeking behaviours. The most significant of these are discussed below.

6.3.1 In-depth investigation into prisoners' information needs and seeking behaviours

This study contributes to both breadth and depth of understanding regarding prisoners' information needs and associated behaviours. As highlighted previously in table 4 (see section 5.2), there is a lack of prior research into the information needs of prisoners, particularly adult males who account for 93% of the prison population in Scotland (Carnie and Broderick, 2019, p. 2); a similar age/sex ratio reported in the majority of countries worldwide (World Prison Brief, 2021). This study presents evidence and discussion encompassing information needs on a wide range of topics, including prison-specific needs relating to the prison regime, rehabilitation, reintegration, and the law, emotional needs relating to mental health and relationships, and everyday needs relating to education, physical health, and recreational interests. While findings of this study support existing assertions that prisoners have information needs similar to those of the general public (i.e. Eze, 2014; Rafedzi and Abrizah, 2014; Sambo *et al.,* 2017; Tarzaan *et al.,* 2015) and experience specific coping and/or emotional needs as a result of their imprisonment (i.e. Canning and Buchanan, 2019; Chatman, 1999; Emasealu and Popoola, 2016; Nacro, 2009), there is also valuable evidence and insight into information needs previously not well evidenced (i.e. relating to relationships and rehabilitation). Findings of this study strongly indicate that prisoners' information needs are often unmet, providing valuable additional evidence to support claims that prisoners often live in information-impoverished circumstances (i.e. Canning and Buchanan, 2019; Chatman, 1999), but also offer important further insight into factors which can make information needs difficult for prisoners to address (e.g. the sensitivity and complexity of needs). Key areas in which this study contributes to the current understanding of prisoners' information needs relate to the sensitivity of information needs in the prison context, the complexity of prisoners' information needs, and the potential negative impact of unmet information needs upon prisoners' mental health, relationships with family, and rehabilitation.

Also making an important contribution to the LIS field, this study offers insight into prisoners' interactions with a broad range of information sources, including non-interpersonal sources such as media (i.e. television, radio, newspapers, and magazines), learning centre resources (i.e. legal texts, encyclopaedia software, and library books), and printed prison resources (i.e. posters and the prison induction booklet), and interpersonal sources, such as staff employed by the prison (i.e. prison officers, teachers, the prison chaplain, prison librarian, and physical training instructors), professionals not directly employed by the prison (i.e. healthcare professionals, solicitors, social workers, addiction

support services), and non-professional sources of information (i.e. other prisoners, family, friends (outside of the prison), and Listeners (prisoners trained by the Samaritans to provide emotional support to their peers). As highlighted previously in table 5 (see section 5.3), again, there is a lack of prior research on the information sources used by prisoners, particularly adult males who account for the vast majority of prisoners worldwide (World Prison Brief, 2021), and this study therefore makes an important contribution in this area. A lack of detail on source categories identified in existing studies is noted; for example, Sambo *et al.* (2017) identify "prison staff" as a source and Stevens (1994) identifies "civilian staff" as a source but neither describe the specific staffing roles included within these categories. In comparison, where sources identified in this study are grouped into categories (e.g. legal texts, library books, and encyclopaedia software under 'learning centre resources'), detail of the sources covered by categories is specified and prison staff groups are discussed individually. This study also evidences and provides insight into sources unidentified in previous work (i.e. addiction support services, Listeners, and physical training instructors) and sources only identified previously with limited evidence (i.e. the prison chaplain, prison librarian, and social workers). Key areas in which this study contributes to understanding of the information sources available to prisoners and factors influencing engagement with these, relate to factors promoting prisoner' use and/or preference for interpersonal information sources (e.g. accessibility, trustworthiness, benefits for mental health), the value of information involved by lived experience in the prison context, and how the sensitivity of information needs influences the sources used by prisoners when attempting to address these.

Findings of this study also offer evidence and insight around a wide range of issues which influence the meeting of prisoners' information needs on a variety of topics, including practical access issues (i.e. lack of internet, telephone access and privacy, contact with family via visits, and isolation during lock up times), social and affective issues (i.e. fear of stigma, distrust, and low self-esteem), and a range of other issues (i.e. drug-induced states, risks to sentence progression, and mis/disinformation). As highlighted previously in table 6 (see section 5.4), there is limited prior research into issues which influence the meeting of prisoners' information needs; again, particularly adult males who account for the vast majority of prisoners worldwide (World Prison Brief, 2021). While prisoner' lack of internet access and issues relating to distrust and stigma in the prison context are identified and evidenced in existing work (albeit to various degrees), there is currently very limited insight into other issues identified in this work which influence the meeting of prisoners' information needs (i.e. relating to telephones, visits, lock up, and self-esteem). Findings of the current study also present much needed evidence and further insight into issues previously unidentified in prior work (i.e. drug-induced states and risks to prisoners' sentence progression). This study therefore makes a significant contribution to the understanding of issues which can negatively influence the meeting of prisoners' information

needs, particularly in relation to a range of access, social and affective, and stress/coping issues, which findings suggest can also negatively influence prisoners' mental health, relationships with family, and rehabilitation. The identification of these issues also makes an important contribution by highlighting areas where/when intervention may be required to support the prisoners to address needs.

Another contribution of this study lies in the more holistic picture of prisoners' information behaviour which can be gleaned by looking to findings which evidence relationships between prisoner' information needs, sources, and associated issues. For example, findings suggest that, while prisoners may appreciate the importance of maintaining good mental health, the sensitivity of this topic in the hypermasculine prison context often results in a preference for seeking and sharing associated information only with trustworthy sources, such as family or close prisoner friends. However, findings demonstrate how contact with family can be negatively influenced by issues relating to access and lack of privacy (e.g. visit and phone-related issues) and interactions with close prisoner friends can be negatively influenced by issues of distrust and social norms of the prison. With the few alternative sources available in the prison often discussed by participants of this study in negative terms (e.g. healthcare professionals), it is clear why some prisoners may choose to leave information needs relating to their mental health unmet. As such, while findings suggest that unmet needs may stem from prisoners' unawareness of the relevance and/or utility of sources, this is not always the case, as prisoners may understand which source is best positioned to provide the information they require, but feel unable to interact with it for a variety of reasons. Findings of this study therefore not only offer insight into prisoners' natural seeking preferences (e.g. the preference for interpersonal sources, particularly those with lived experience), but also highlight how the physically and emotionally restrictive nature of prison life can restrict the options (i.e. sources and types of information seeking) which prisoners view as viable. In other words, to outsiders it may appear that prisoners have access to a wide range of sources to address specific information needs but, due to a combination of complex social and practical access issues which influence prisoners' information seeking, prisoners may find they are presented with a much smaller pool of sources through which they can address needs.

It is noted that research offering insight into prisoners' information needs and seeking behaviours has often focused on the prison library context (Bajić, 2015; Eze, 2014; Emasealu and Popoola, 2016, Omagbemi and Odunewu, 2008, Sambo et al., 2017) or prison education context (Rafedzi and Abrizah, 2014). One exception is a recent study by Canning and Buchanan (2019) which presents a useful overview of prisoners' information behaviour but provides limited evidence and depth of insight due to its exploratory approach and restraints on time to conduct data collection (i.e. three weeks). Findings of the doctoral study are not only better evidenced due to the substantial volume of valuable empirical data presented in the thesis but also offer greater depth of insight into findings previously

only evidenced to limited degree in this prior work (e.g. the heightened sensitivity of certain information needs in the prison context and the importance of lived experience in the context of prisoners' information seeking). This, in addition to the identification of novel findings (e.g. the link between prisoners' coping strategies and their ability to recognise and act upon their information needs) makes a significant contribution to the LIS field.

Overall, findings of this study demonstrate how prisoners' lived experience of prison shapes their information needs, how they view these, interact with potential sources of information, and respond to issues which negatively influence the meeting of their needs. The importance of lived experience in informing how prisoners perceive the utility of certain information sources is evident, with greater value and credibility attributed to information obtained from other prisoners as opposed to prison staff (who work within the prison environment but lack an understanding of the prisoner experience). Such findings offer much needed evidence of and insight into the influence of small world living on prisoners' information behaviours and how behaviours within this environment is influenced by physical and social influences which ultimately inform prisoners' worldview.

6.3.2 Application (and implications) of the theoretical framework in the prison context

Findings offer insight into key concepts of three theories and one model of information behaviour in the prison context, including Wilson's (1997) Revised General Model of Information Behaviour, Taylor's (1968) Question-Negotiation Theory, and Chatman's (1996) Theory of Information Poverty and (1999) Theory of Life in the Round. From a review of previous empirical studies of prisoners' information behaviour, there are few which have included conceptual considerations. For example, of the eleven studies incorporated in the review of related work in chapter 2, only those by Canning and Buchanan (2019) and Chatman (1999) refer to a guiding theoretical framework; highlighting this study's consideration of guiding theoretical concepts as an important contribution in the context of prisoners' information behaviour within the LIS field. Key contributions relating to the theoretical framework which guided analysis of data in this study are discussed below.

Findings of this study offer valuable insight into concepts of Wilson's (1997) Revised General Model of Information Behaviour in the prison context. For example, mapping findings to this model, the 'person in context' is an adult male who is serving a long-term prison sentence but who could be at various stages of imprisonment (i.e. newly imprisoned, mid-sentence, or approaching release). The 'context of need' may vary depending on prisoners' individual situations and influencing factors; for example, the context could be *sensitive* if needs relate to mental health, relationships, or learning issues which are deemed inappropriate for disclosure in the emotionally-restrictive hypermasculine prison context,

or *complex* if needs relate to periods of change (e.g. initial adaptation to prison life or upcoming release) and/or are interwoven and concurrent, causing feelings of uncertainty and anxiety.

The influence of Wilson's (1997) 'activating mechanisms' is also evident in findings. For example, offering insight into the influence of stress/coping strategies on the meeting of information needs in the prison context, findings suggest that the coping strategies employed by prisoners in response to feelings of uncertainty and stress can negatively influence recognition, comprehension, and action in response to information needs. Offering insight into the influence of risk/reward evaluations, findings also suggest that prisoners often weigh benefits of obtaining information to address needs against the risks associated with seeking information (e.g. stigma, violence, and risks to sentence progression), and that such evaluations often result in inaction, with needs left unmet. Offering insight into the influence of social learning, findings also suggest that prisoners learn how to respond to and/or cope with information needs in a manner that is considered 'appropriate' and in line with hypermasculine social norms of the prison by seeking information from and/or observing other prisoners.

There is also evidence in this study which contributes to understanding of Wilson's (1997) 'intervening variables' in the specific context of prisoners' information seeking behaviour. For example, findings demonstrate a range of factors which can influence interactions with sources, including interpersonal issues (e.g. negative attitudes towards social workers inhibiting interactions with this source), environmental issues (e.g. social norms deeming certain needs inappropriate for disclosure), and role-related characteristics (e.g. professional experience and/or training contributing to the perceived credibility of sources). Findings highlight the potential for intervening variables to have both a positive and negative influence on prisoners' interactions with sources and demonstrate how intervening variables can also be interwoven. For example, while findings demonstrate how accessibility influences prisoners' use of sources, this can be considered an environmental influencing factor (e.g. prison security preventing access at specific hours) as well as a characteristic of the source itself (e.g. being in written format which prisoners with literacy issues may struggle to access).

A range of Wilson's (1997) identified 'information-seeking behaviours' are also evident in findings. There is evidence of 'passive attention' leading to acquisition of relevant information through everyday conversations with other prisoners and the watching of television, and 'passive searching' whereby prisoners engage in information seeking by proxy through approaching sources who can seek information on their behalf from difficult to access and/or inaccessible information sources (such as the internet). There is also evidence of 'active searching' with prisoners purposively approaching sources (often carefully selected after considerations of relevance and risk) to seek information required to meet needs. Following the acquisition of information, findings suggest that prisoners' 'information processing and use' varies. For example, while information was obtained in various ways

(whether passive or active, purposefully or serendipitously), prisoners did not always utilise information if they deemed it to be irrelevant, if it could not be understood due to cognitive deficits, or if use was in contradiction to social norms or could cause feelings of personal inadequacy or weakness (e.g. confrontation of mental health issues).

Wilson's (1997) Revised General Model of Information Behaviour has been previously only applied to the prison context in a review of literature on prisoners' information needs by one author (Campbell, 2005). As such, the current study's incorporation of Wilson's (1997) model into the guiding theoretical framework presents much needed evidence and insight into the applicability of this model in the context of prisoners' information behaviour. Findings demonstrate the complexity of the relationships between the various stages presented in Wilson's model, further contributing to the understanding of nested concepts and theories. For example, findings suggest that activating mechanisms not only influence motivation to address needs, but also influence information seeking behaviours (e.g. risk/reward evaluations may influence decisions on whether to engage in explicit active seeking of information or more passive indirect seeking to minimise risks) and use of acquired information (e.g. stress/coping strategies may influence acceptance or rejection of certain information depending on whether it will increase or reduce feelings of stress and uncertainty). This suggests a more a non-linear and iterative path between the various concepts and nested theories of the model as opposed to the linear and cyclical process presented by Wilson. By utilising Wilson's (1997) model as a macro-level framework and incorporating other theories relevant to the current study (discussed below), the doctoral work builds significantly upon findings of the researcher's prior work on the same topic.

This study also presents evidence with offers valuable insight into concepts of Chatman's (1996) Theory of Information Poverty and (1999) Theory of Life in the Round in the prison context. For example, findings present evidence of prisoners assigning additional value to interpersonal sources who can provide information informed by lived experience of a situation, with information obtained from other prisoners was viewed as having additional credibility (in contrast with prison staff). This links to insider/outsider influences which Chatman (1996; 1999) proposes determine types of information sought and from where it is sought in information-impoverished circumstances. Findings of this study also suggest that a degree of risk is associated with interpersonal information interactions and there is evidence of prisoners engaging in *secrecy*, *deception,* and *risk-taking* behaviours in attempts to shield themselves from the potential negative consequences (much stigma-related) associated with revealing and/or seeking information to address needs, further contributing to understanding of self-protective behaviours proposed in Chatman's (1996; 1999) theories of information poverty and life in the round in the prison context. Findings of this study provide valuable further evidence and insight into the contextual influence of small world living on information

behaviour and issues which contribute to prisoners living in information-impoverished circumstances, with their information needs often unmet. This study's incorporation of Chatman's (1996; 1999) theories into the guiding theoretical framework serves to demonstrate the ongoing relevance of related concepts following a twenty-year period (e.g. socials norms and self-protective behaviours such as *secrecy* and *deception*); particularly valuable given that few recent studies have since alluded to Chatman's work in the prison context (e.g. Canning and Buchanan, 2019). However, beyond simply evidencing the ongoing relevance of these concepts in the prison context, this study evidences the relationship between context of need (e.g. sensitive) and self-protective information behaviours, while also offering insight into the consequences of these behaviours for individuals beyond unmet needs (e.g. how non-disclosure of needs can negatively influence prisoners' mental health). There is also evidence that the self-protective behaviours employed to protect against the potential negative consequences (e.g. stigma) of revealing and/or seeking to address needs, offer only short-term protection and can trigger negative consequences at a later time (e.g. avoiding immediate risks of stigma by hiding emotional needs could cause chronic feelings of uncertainty in the long-term contributing to further needs relating to anxiety and mental health issues).

Findings of this study also offer valuable insight and contribute to the understanding of concepts in Taylor's (1968) Question-Negotiation Theory as applied in the prison context. Findings present evidence of prisoners' information needs relating to mental health and relationships which appear to be unrecognised and/or poorly understood, suggesting needs at early 'visceral' and 'conscious' levels. Findings also suggest that coping strategies based on suppression, avoidance, and distraction can influence recognition and comprehension of needs, offering insight into the influence of stress/coping on the progression of early stage visceral and conscious levels of need. There is also evidence of prisoners struggling to articulate their information needs to others due to issues around comprehension of needs (and various social risks), suggesting difficulties progressing needs from 'conscious' to 'formalised' levels. Findings suggest that prisoners engage in indirect discussion of sensitive information needs to minimise social risks, such as discussing emotional problems without using terms suggesting 'weakness', which is considered inappropriate in hypermasculine contexts; demonstrating evidence of needs at the 'compromised' level, which are articulated and presented in a manner that is accepted to the information system (or in this case, other individual). Previously unexplored in the prison context, findings of this study offer unique insight into the applicability of Taylor's (1968) Question-Negotiation Theory and present valuable evidence and insight into factors which can influence recognition, comprehension, and articulation of prisoners' information needs.

6.4 Limitations of research

This section discusses the limitation of the research with regards to the research approach and design, the theoretical framework, and the functional limitations of prison research.

6.4.1 Limitations of the research approach and design

It is necessary to acknowledge limitations relating to the research paradigm of the current study. Utilising a constructivist ontological approach, the researcher sought to explore the various 'realities' of participants and their subjective experiences of information within the specific context of the prison. The epistemological approach of the research was interpretivist as the researcher wanted to emphasise participants' personal perceptions and experiences of information to yield depth of insight into prisoners' information needs and the factors influencing their information behaviours. This approach was felt to be suited to the purposes of the current study but is acknowledged as a limiting factor in the overall framing of the study, given that a different ontological and epistemological approach (e.g. taking a 'positivist' approach with a greater emphasis on deductive methods and the theoretical framework) could have yielded different insights into prisoners' information needs and seeking behaviours; perhaps offering greater insight into how the shared experience of imprisonment shapes information behaviour in the small world of the prison.

To collect data which would yield depth of insight into prisoners' information needs and seeking behaviours, qualitative methods enabling the researcher to interact with the phenomenon being studied and placing an emphasis on participants' perspectives were considered appropriate. One-to-one semi-structured interviews were identified as a suitable data collection tool and the research, while largely inductive due to the lack of existing research on prisoners' information behaviours, also incorporates deductive elements due to the use of a guiding theoretical framework and involvement of researcher in the analysis of data. Despite the researcher's doctoral supervisor cross-checking codes for coherence and consistency during data analysis, the potential for bias in the interpretation and presentation of results is recognised; hence, the decision to present findings and the discussion of these in separate chapters, allowing readers to view data initially without any meaning or interpretation inferred by the researcher (other than the identification of overarching themes of information need, sources, and issues which provide structure to the findings chapter). Given this study's aim to capture data which would offer insight into prisoners' experiences of information, the benefits of drawing upon the researcher's previous knowledge and experience via a phenomenological approach to data analysis and interpretation was felt to be justified, despite limiting the replicability of the study's findings (i.e. acknowledging that a researcher conducting this study without previous experience of working and/or researching in prisons or taking an entirely objectivist approach to the research, might yield different results).

There are also limitations relating to the decision to utilise qualitative interviews as the sole data collection tool. These one-to-one interviews lasted approximately one hour, and more than half of participants participated in follow-up interviews, allowing the researcher to build trust and further explore topics of interest which emerged in interviews. This also gave participants time to reflect on their information needs and behaviours between interviews. However, this data collection method meant that the researcher had to invest a significant proportion of their time recruiting participants, describing the research, obtaining consent, guiding participants through pre-interview questionnaires, conducting interviews, and debriefing participants. In addition, the researcher also personally conducted full transcription of interviews in consideration of the ethical concerns about outsourcing this task. Given time limitations of the doctoral work, the sample size of the study was limited to twenty-four participants, which was considered appropriate for research aiming to explore sensitive topics and allowing the researcher to establish a rapport with participants. However, it is acknowledged that this relatively small sample taken from one prison limits the generalisability of findings to the wider prison population (further discussed in section 6.4.3).

Also relating to the sample, as the doctoral study was conducted at the same fieldwork location as the pilot study, it was recognised that some participants from the previous study might choose to participate in the current study. In total, eleven participants from the original MSc study volunteered to take part in the doctoral research (this was coincidental as the recruitment of participants was not conducted to purposefully seek out previous participants). It was acknowledged that these participants were likely to possess a greater understanding of key concepts and to have benefitted from time to reflect upon their previous participation. This is reflected in the fact that interview discussions with previous participants were found to enter a natural flow and dialogue concerning needs, sources, and issues, with little prompting via the interview schedule and discussions were noted to revolve around more sensitive topics and with greater levels of detail than those with new participants. However, it is recognised that data collected from the perspectives of these participants may not be representative of the wider prisoner population who do not have an existing awareness and/or understanding of the research topic. This unintentional re-interviewing of previous participants, while a factor limiting the generalisability of findings, was not considered a weakness of the study, and was found to be beneficial in allowing the researcher to make use of pre-existing relationships to demonstrate trustworthiness to new potential participants and helped the researcher to obtain insightful data on sensitive topics given their established trust with previous participants.

There are also limitations relating to the presentation of data in the thesis which stem from ethical considerations. Braun and Clarke (2006) advocate for presenting data extracts illustratively, often as longer narratives with introductory text describing the scenario described within the extract (p. 93).

However, due to concerns about the preservation of participant anonymity, a more analytical approach was taken in the presentation of data; with longer narratives containing information which could potentially identify participants often separated into shorter extracts and presented under the relevant 'needs', 'sources', or 'issues' sections in the findings chapter of the thesis. While this is acknowledged as detracting from the 'narrative flow' of findings and resulted in some vivid and compelling descriptions of prisoners' experiences of information not being fully represented in the thesis, this approach was deemed necessary to preserve the anonymity of this vulnerable group; particularly where discussions covered sensitive topics. Therefore, the researcher took a careful approach to the selection and presentation of data in the thesis, attempting to present data extracts which were detailed, insightful, and moving, but also unlikely to reveal participant identities.

6.4.2 Limitations of the theoretical framework

This study explored prisoners' information needs and seeking behaviours from a LIS perspective, utilising Chatman's (1996; 1999) theories of information poverty and life in the round, Taylor's (1968) question-negotiation theory, and Wilson's (1997) Revised General Model of Information Behaviour. Despite inductive elements helping to address some of the theoretical limitations of the study and the recognition of Wilson's (1997) model which incorporates interdisciplinary aspects being valuable in helping the research to take a broader approach to the interpretation of data (utilising theories of stress/coping from psychological, risk/reward from consumer research, etc.), the LIS perspective utilising three theories and one model of information behaviour is acknowledged as a limitation of the current study. It is acknowledged that further research looking wider to other fields for insight could be useful in yielding additional insights into prisoners' information behaviour.

Inductive elements of data analysis helped to address some of the limitations of the theoretical framework of the doctoral research. For example, the focus on females in Chatman's (1996; 1999) studies could be considered a limitation when attempting to apply related concepts of information poverty and small worlds (e.g. self-protective behaviours, social norms, etc.) in male contexts. However, inductive elements of the data analysis helped to build connections between Chatman's theories and findings of the current study, identifying themes pertaining to social norms stemming from issues of hypermasculinity in male contexts, and relationships between self-protective behaviours and the risks associated with the recognition, articulation, and seeking of information needs on sensitive topics in the male prisoner context. Inductive elements of analysis also assisted in the identification of themes relating to the compromising of needs, particularly prisoners' careful articulation of needs due to social risks, which could be compared to but did not entirely align with the concept of the 'compromised' need as proposed in Taylor's (1968) question-negotiation theory

(which refers more to the need to meet the requirements of an information system such as a computer while conveying an information need in order to obtain relevant information). Also, while Wilson's (1997) model has been criticised for its use of nested theories which are drawn from other fields but with only limited depth of discussion (Case and Given, 2016), the current research discusses and defines relevant concepts, such as risk, trust, and stress (see chapter 2), and inductive elements of data analysis yielded greater insight into the relationships between nested theories in this model, including the influence of stress/coping on the meeting of information needs (particularly within the prison context but with potential to apply findings to other hypermasculine or secure contexts).

The theoretical framework of this study is focused on exploring and attempting to explain contextual influences on prisoners' information behaviour, including physical, social, and affective factors which may sensitise certain information needs making them difficult to address. This framework does not provide an approach for identifying avenues to support the meeting of information needs or to overcome contextual influencing factors which contribute to issues. While this study makes two key recommendations for practical action/policy/change and suggests cultural activities grounded in and/or supported by prison libraries as a potential avenue for supporting the meeting of sensitive information needs in the prison context, without further research, it is outside the scope of this study to identify other avenues of support, and this is therefore recognised as a limitation of the work.

6.4.3 Functional limitations of prison research

This study focused on exploring the information needs and seeking behaviours of adult male prisoners. All participants were adult males serving long-term (4 years +) prison sentences; of the total prison population in Scotland, the most recent prisoner survey indicates that 93% are adult males and 45% are currently serving sentences of 4 years or more (Carnie and Broderick, 2019, p. 2). Given that prisoners are not a homogenous group, findings of this study cannot be taken to represent the overall prison population, which also includes female and juvenile prisoners, and those held on remand or serving short-term prison sentences. However, it is noted that despite adult male prisoners constituting the vast proportion of the worldwide prison population (World Prison Brief, 2021), there are few qualitative studies on the information needs and seeking behaviours of this demographic, with several instead focusing on female prisoners (e.g. Chatman, 1999; Nacro, 2009) or juvenile prisoners (e.g. Rafedzi and Abrizah, 2014). By focusing on adult male prisoners, this study contributes significantly to the current level of understanding regarding the information needs and seeking behaviours of this specific prisoner demographic group and provides much needed further insight into specific issues (e.g. hypermasculinity) which influence the meeting of adult male prisoners' information needs; as suggested by previous research (e.g. Canning and Buchanan, 2019).

In accordance with access guidelines set forth by the SPS Research Access and Ethics Committee, all participants were recruited from HMP Shotts, a maximum-security prison for adult male prisoners run by the Scottish Prison Service. Given that prisons in Scotland vary in terms of prisoner population, overall capacity, and design (Scottish Prison Service, 2021c), it is acknowledged that by conducting research at only one fieldwork site, the research approach incorporates case study elements and findings may therefore not be representative of prisoners held at other SPS institutions. However, conducting fieldwork at a single long-term prison offered several benefits to the research, including permitting access to a relatively stable long-term prisoner population where admissions, transfers, and releases are less frequent than in other types of prison, making recruitment and ongoing access to participants easier. On an important practical level, it was noted that the researcher's previous employment and research experience at this prison and consequent understanding of prison operations and existing relationships with both prisoners and staff helped to further facilitate access to participants and resources (e.g. interview rooms).

For pragmatic reasons, participants of this study were recruited through the prison learning centre and as such, all were engaged to various degrees with this area of the prison. In a recent prisoner survey, 58% of prisoners in Scotland reported that they had attended the learning centre during their custodial stay (Carnie and Broderick, 2019, p. 5). As such, findings may not be representative of the prison population who do not engage with this facility. However, Bryman (2016) explains that, in some research contexts, convenience sampling may present "too good an opportunity to miss" (p. 187), and it is reasonable to expect that this would apply in contexts where access to participants may be difficult, such as in the restrictive prison environment. Therefore, this recruitment method was considered justified despite limitations imposed upon the generalisability of findings. Prisoners engaged with the learning centre were also viewed as offering an ideal representation of a group living in the small world context, allowing this research to further explore the impact of small world living on prisoners' information behaviour.

In summary, acknowledging the parameters of this study, findings are representative of adult male prisoners who are serving long-term prison sentences, are engaged to some extent with the prison learning centre, and are held at the maximum-security prison, HMP Shotts. Findings should not be taken to reflect female and juvenile prisoners, prisoners held on remand or serving short-term prison sentences, prisoners who do not engage with the prison learning centre and/or who are housed at other prisons. Given the limited number of participants who were homosexual or whose ethnicities were not white (see chapter 4), findings are also unlikely to be representative of these demographics.

6.5 Recommendations for future research

In light of findings, this study presents a set of recommendations for future research. Key areas for further investigation are suggested below.

6.5.1 Further explore information behaviour in the small world context of the prison

This study set out to identify the information needs and seeking behaviours of one group of prisoners (adult males) living in small world context. Given the limitations of this study (see section 6.4), further investigation involving other prisoner groups, including age and gender variables, is required to determine the generalisability of findings.

6.5.2 Further explore information behaviour in the context of prisoners' lived experience

This study presents data with offers important depth of depth insight into the contextual influence of the prison on prisoners' information needs, their interactions with sources of information, and a range of social, affective, and practical access issues which hinder the meeting of their needs. The theoretical framework of this study draws upon nested theories and concepts from Wilson's (1997) Revised General Model of Information Behaviour, to offer new insight into the influence of influencing factors (i.e. intervening variables and activating mechanisms). However, findings do not build or expand upon Wilson's (1997) model, and it may therefore be beneficial to utilise findings of the doctoral work to frame further research designed to build a more comprehensive picture of prisoners' information needs, sources of information, and issues influencing information behaviour. Such research could also focus on further exploring self-protective information behaviours and appropriate interventions. The results of such further research could be used to contribute to the development of a model (perhaps extending or modifying Wilson's model) representing prisoners' information needs, sources of information, and associated issues to illustrate the information behaviour of prisoners in the overall context of their lived experience of imprisonment. This model could be developed in such a way that it is applicable across a range of prison contexts (e.g. facilitating exploration of issues such as hypermasculinity in all male prisoners while remaining flexible to allow exploration of alterative contextual issues in prisons with predominantly female or juvenile populations).

6.5.3 Further explore the sensitive context of information need

Findings of this study offer insight into the sensitive context of information need, particularly the way in which social norms in the hypermasculine prison context deem needs associated with weakness (e.g. mental health and relationships) inappropriate for disclosure. Findings suggest that unmet sensitive information needs have to potential to trigger and/or exacerbate existing mental health issues and even contribute to prisoner suicides, and as such, this is an important area for further

attention. Future research in this area could focus on other male prisoner groups (e.g. juveniles or those serving short-term sentences) or explore the sensitivity of information needs in other hypermasculine small world contexts (e.g. all male sports teams or work environments) to further investigate the link between hypermasculinity and difficulties addressing sensitive information needs. Such research could draw upon Chatman's (1996; 1999) theories of information poverty and life in the round and Wilson's (1997) Revised General Model of Information Behaviour to build upon findings of this study (for example, further exploring perceptions of risk and coping strategies). Findings of this study support those of existing research which suggests that in response to feelings of stress, prisoners often employ coping strategies which based on avoidance of stress-inducing issues and associated information (Campbell, 2005; Chatman, 1999; Clemmer, 1940; Sykes, 1958; Goffman, 1961; Dye, 2010; Zamble and Porporino, 1988). Therefore, such research could also further explore the link between stress/coping and recognition of information needs, particularly those of a sensitive nature. Such research could again draw upon Wilson's (1997) model and utilise Lazarus and Folkman's (1984) theory of stress and coping to explore the relationship between emotion-focused coping (e.g. avoidance) and recognition of information needs, to yield further insight into the link between maladaptive coping and unmet sensitive information needs.

6.5.4 Further explore interventions to support meeting of sensitive information needs

In relation to the above recommendation, there is also a need to further explore potential interventions for supporting individuals to address sensitive information needs. Findings of this study present evidence of sensitive information needs which are often not fully actioned or addressed for a variety of issues (e.g. relating to recognition or stigma). Looking at these issues, it seems pertinent to explore indirect approaches which support prisoners to recognise, act upon, and address sensitive information needs independently, without confrontation and/or articulation to others. As previously discussed (see section 6.2.4), there is evidence suggesting that engagement with cultural activity in the prison context encourages self-reflection amongst participants (Bilby *et al.,* 2013; Billington and Robinson, 2012; Browne and Rhodes, 2011; Turvey, 2013), and this study therefore proposes cultural activities as a potential method of supporting prisoners to recognise and act upon sensitive information needs, given that self-reflection may prompt recognition of new needs and/or better understanding of existing needs; and importantly, do so in non-confrontational indirect ways (Hurry *et al.*, 2014; Turvey, 2013). However, as this potential support method is identified as a result of a review of literature, further research (preferably of a qualitative nature) is recommended to explore the suitability of prison libraries as a location in which to deliver cultural activities aimed at encouraging recognition and articulation of sensitive needs and to act as a source of follow-up support. Such research could involve working with prison libraries to provide prisoners access to

tailored information (if required following their cultural engagement), potentially targeting book displays and promotions around the themes of cultural projects to permit prisoners to independently address any arising needs, preparing the librarian in advance should prisoners request assistance in seeking information on these topics, and designing informative follow-up leaflets which direct prisoners to further sources of support if required (e.g. mental health services). Questionnaires and/or interviews could be utilised to determine the extent to which such interventions provide adequate access to follow-up information and support required to address needs explored or potentially surfacing during activities. Such research could draw upon concepts in Wilson's (1997) Revised General Model of Information Behaviour (e.g. activating mechanisms and intervening variables) to explore the suitability of the prison library as a context for triggering recognition, encouraging articulation, and supporting information seeking in relation to sensitive information needs.

6.6 Recommendations for practical action/policy/change

This section outlines two key recommendations to the Scottish Prison Service for practical action/policy/change, the implementation of which should help tackle and/or mitigate the various issues which make it difficult for prisoners to address their information needs, thereby better supporting their rehabilitation.

6.6.1 Run mental health promotion campaigns and offer prisoner-led support groups

In relation to the above recommendation for further exploration of potential interventions to support the meeting of sensitive information needs, prior to the outcomes of such research, it would be valuable to implement a program of support to help prisoners raise prisoners' awareness and understanding of the symptoms of poor mental health, helping them to identify associated needs, and directing them towards sources of information and/or support. Savolainen (2015) notes that "cognitive barriers" such as an unawareness of relevant information sources can restrict individuals' access to information (p. 617), and findings of the current study highlight the need for prisoners to note only feel motivated to seek help for mental health issues but also to have access to clear directions on how to go about this (e.g. posters on mental health displayed around the prison were viewed as not offering "many options or outlets to do so").

The first step of such a programme would be to increase awareness of the prevalence of mental health issues in male prisons to tackle the stigma associated with this topic and encourage prisoners to consider whether they themselves are experiencing such issues. This could be done via health promotion campaigns involving posters displayed around the prison on the topic of mental health, presenting both persuasive messages to encourage prisoners to consider the relevance of mental

health issues to their own situation, and informative messages to give detail on how and where to seek support for such issues. These messages should seek to tackle stigma associated with mental health issues (Is this issue common?), encourage help-seeking (Why is this issue something I should act to resolve?), and highlight potential support avenues (Where should I go to seek help for this issue?). Regardless of style of communication, messages be designed to appeal to a male audience and should be succinct and avoid providing too much information which may result in overload and avoidance of the message**.** Some direction is provided by existing campaigns targeted at tackling the stigma associated with men's mental health; e.g. Manor's 'Strong not Silent' Campaign (Manor, 2021) includes a short informative video filmed in black and white in a gym setting which succinctly highlights the prevalence of male suicide in the UK and how fear of discussing mental health may be a contributing factor, and directs men towards support available via their website. To further support recognition of mental health issues, prison staff (in a variety of roles) should receive training on indicators of poor mental health and emotional issues so they can refer/direct prisoners to relevant sources of information and/or support where necessary. Education programmes could also serve as a useful trigger for encouraging prisoners to reflect on their own situation and mental health. An indirect and non-confrontational way of introducing this trigger could involve incorporating themes of masculinity, isolation, and/or mental health into cultural activities as proposed in the previous section.

The next step of this programme to support the meeting of sensitive information needs in prisons (where the internet is not accessible) would ideally involve providing quick and easy access to relevant support services in a variety of formats; given that prisoners may have personal seeking preferences (e.g. illiterate prisoners may prefer interpersonal sources, while those with privacy concerns may prefer to independently seek information from printed sources). This could involve offering indirect support, such as bibliotherapy and materials relating to mental health, through the prison library (linking to previous discussion regarding the potential support role the prison library can play in supporting prisoners to address their information needs) and ensuring formal mental health support services are professionally trained and available. Building positive relationships and attitudes towards healthcare professionals is crucial to ensuring prisoners' engagement with healthcare services, and as such, initiatives such as outreach programmes may also be valuable to explore. Given the importance of lived experience in prisoners' information seeking as highlighted in this study, it may be pertinent to look at delivering support groups run by prisoners for prisoners. Such initiatives have been previously recognised as valuable in the prison context and acknowledged as allowing prisoners to "pull away their macho masks of pseudomasculinity and share common feelings […] They feel a sense of community and thus discover a comforting sense of support" (Breimen and Bonner, 2001, p. 223).

6.6.2 Expand prisoners' access to technology

Findings of this study highlight issues around lack of access to technology which can negatively influence the meeting of their information needs, including restricted access to prison telephones and the lack of direct internet access. This not only prevented some prisoners from addressing information needs but appeared to have the potential to negatively impact on their wellbeing, relationships, and rehabilitation, and as such, requires attention. Recommendations in this area are discussed below.

In response to the suspension of all non-essential physical visits to Scottish prisons in March 2020 due to national COVID-19 restrictions, the Scottish Prison Service announced in April 2020 that they would provide prisoners access to mobile phones to help them maintain contact with their families (Scottish Prison Service, 2020a). These mobile phones are pre-loaded with 300 minutes of calling credit per month (at no cost to prisoners) and do not allow text or internet functionality (Scottish Prison Service, 2020b). While calls made on these mobile phones are still monitored by the prison, findings of this study suggest that simply allowing prisoners to make calls from inside their prison cells may offer "the illusion of privacy", enabling them to speak more openly about sensitive issues and to potentially address associated needs. Findings therefore support prisoners having continued access to mobile phones following the end of COVID-19 restrictions given benefits for prisoners' mental health and relationships. It is noted that use of mobile phones at HMP Shotts is currently only permitted during allocated timeslots between 8 am and 10 pm (Scottish Prison Service, 2020b), and given that participants of this study highlighted the potential for nightly lock up to trigger mental health needs, the inability to access valuable sources of support (such as The Samaritan's helpline and family) during this time remains problematic. As such, it may be pertinent for Scottish prisons to consider offering access to mobile phones outside of the current restricted times to fully support prisoners' wellbeing.

Looking to the issue of prisoners' lack of internet access in Scotland, supervised and/or limited internet access for prisoners has been introduced in several countries worldwide, including Norway in 2009 (Inside Time, 2014), in Germany in 2013 (Deutsche Welle, 2013), Belgium in 2014 (BBC, 2016), and Finland in 2015 (Justice Trends, 2021). Perhaps due to the current lack of research on the impact of the introduction of such technology in prisons, the subject of prisoners having internet access remains a topic of continued debate in the UK, particularly with regards to its value in helping prisoners to prepare for release and reintegration into an increasingly digital society (e.g. Coates, 2016). Some participants of this study suggested that introducing and/or expanding technology in prisons could have benefits in several areas, including supporting prisoners to maintain family relationships, supporting prisoners' education, and helping them to keep up to date on any changes which occur in the outside world during their imprisonment. Findings suggest that the lack of internet access is

particularly problematic for prisoners who are remotely studying university degrees; an issue also identified in previous work (Canning and Buchanan, 2019). Findings of this study highlight how the lack of internet access not only made it difficult for prisoners to seek the information required for their university courses but could also leave them feeling "frustrated" and "lonely", suggesting negative impacts for their mental health. Rafedzi and Abrizah (2014) point out that in Malaysia, juvenile prisoners participating in higher education are permitted access to the internet to email tutors, write and submit assignments, and access online libraries. This study recommends the introduction of direct (albeit limited and supervised) access to educational information on the internet for prisoners studying higher education courses; this could be trialled initially with a small group of prisoners studying higher education at a prison with a relatively stable prisoner population such as HMP Shotts. The introduction of such access on a small scale may act as a suitable starting point for further exploration of the practicalities of introducing internet access for prisoners in Scottish prisons.

6.7 Personal reflection

This personal reflection is authored in first person and offers insight into my development as a researcher while conducting the doctoral research described in this thesis. I begin by describing my background prior to PhD research, summarising relevant aspects of my academic and employment background, and then reflect on the skills, personal qualities, and knowledge I have developed during my PhD which will be of value in future research and/or careers.

6.7.1 Researcher's background prior to PhD

In 2016, I completed a master's degree in Information and Library Studies at the University of Strathclyde, in which I expanded my knowledge and skills and acquired professional accreditation in the field of librarianship. Between 2015 and 2017, I worked as a prison librarian at three Scottish prisons, HMP Low Moss, HMP Shotts, and HMP Kilmarnock, managing libraries for between approximately 500 and 800 prisoners in each establishment. This experience was my initial motivation for undertaking research into the information behaviours of prisoners, as I witnessed first-hand the difficulties prisoners experienced when attempting to address their information needs, which often appeared complex and poorly understood by both prisoners themselves and prison staff.

6.7.2 Skills, personal qualities, and knowledge developed during PhD

My writing skills have improved significantly during my PhD. The experience of writing the doctoral research proposal, applications for ethical approval to the Strathclyde Ethics Committee and Scottish Prison Service (SPS), requests for additional funding and/or extensions to the Scottish Graduate School

for Arts and Humanities (SGSAH), and working with a co-author (my PhD supervisor) to write, edit, and publish academic research (see Canning and Buchanan (2019) and Canning and Buchanan (2021)) has helped me to develop my writing skills and granted me useful knowledge and experience in these areas. I feel that I have developed the skills necessary to write for a range of academic purposes (e.g. research proposals, ethics applications, funding/extension requests, and academic publishing).

I have also developed my research skills significantly during my PhD. The experience of conducting thorough and systematic literature reviews has strengthened my ability to recognise findings of relevance to my PhD, to constructively criticize the work of others, and to identify where I could build upon existing research. Through the literature review process, I was also able to develop my theoretical understanding of information behaviour and concepts frequently used in the wider LIS field and those drawn from other relevant fields (e.g. criminology and penology). Conducting qualitative interviews during the PhD research also helped me to further develop my skills as an interviewer. For example, in contrast to my previous MSc study, I felt better able to direct conversations, to enquire further when participants make interesting statements, and to appreciate the subtext behind participants' words by interpreting body language and intonation during interviews in the doctoral research. Exploring sensitive topics in interviews and learning to recognise signs of emotional distress has helped me develop my ability to ethically conduct research involving sensitive one-to-one interviews with vulnerable participants. Working with large volumes of empirical data has strengthened my ability to efficiently analyse and code data and to scrutinize and select suitable and compelling evidence to reflect findings. Collectively, these experiences have helped me to develop valuable research skills in several areas (e.g. conducting literature reviews, qualitative interviews, and data analysis) which will be valuable in any future research.

The doctoral experience has also helped me to develop a range of skills relating to time and risk management. For example, prior to fieldwork, I conducted a risk analysis to identify potential issues which could negatively affect interviews and identified appropriate measures to mitigate these; e.g. prison lockdowns were recognised as having the potential to inhibit access to participants and therefore, a flexible and opportunistic approach to interviewing was maintained throughout the duration of fieldwork to prevent any unexpected lockdowns from detrimentally affecting the research. I have also become better able to remain adaptable and flexible in response to unexpected issues. For example, in 2019 and again in 2020, I required surgery which left me unable to write and/or type during the extended recovery period. I adapted to this by identifying tasks in advance which I could work on during recovery, such as reviewing literature and coding data, so that I could continue to make progress on my PhD. I also developed my time-management skills further as a result of having to balance PhD work with additional caring responsibilities during the COVID-19 pandemic; to manage

time effectively, rather than working on my PhD from 9am to 5pm as I had done prior to the pandemic, I committed to work on my PhD for a minimum number of hours each week as opposed to during set hours. The development of valuable risk and time management skills helped me to make consistent progress on my PhD even in light of unforeseen events, which will be of value in any future roles.

My communication skills have also developed significantly during my PhD, particularly with regards to the dissemination of research findings via presentations and networking both within and outwith the academic context. For example, I disliked public speaking prior to my PhD but as a member of the Strathclyde iSchool Research Group, giving regular presentations on my research regularly to other members (who were supportive and offered constructive feedback) helped to increase my confidence and skills in this area. This then helped me feel able to present to larger audiences at conferences run by the SGSAH and in the prison context to key SPS stakeholders. In addition to the relationships formed with academic staff and students via participation in research groups and conferences, liaising with SPS stakeholders helped me to develop my networking skills, expand my professional network, and establish relationships with individuals who might support access to prisoners for future research. I witnessed the value of previous networking as I found my existing relationships with a range of SPS staff (at both local prison and executive HQ level) to be valuable in facilitating ethics approval and access to participants in this study. These experiences helped me develop my communication skills and further establish a positive reputation in both the academic and professional prison context.

6.8 Final conclusions

The study explored the information needs and seeking behaviours of prisoners via interviews with twenty-four prisoners at HMP Shotts. The prisoners that participated in this study sought information on a variety of topics (the most frequently discussed relating to mental health, relationships, and the prison regime) with a clear preference for interpersonal sources, particularly those considered trustworthy or who could provide information informed by lived experience. A range of contextual factors, particularly the influence of social norms in the hypermasculine prison environment, influenced information behaviours in response to sensitive information needs relating to mental health, relationships, and learning issues; which appear often unmet. Numerous issues inhibited the meeting of prisoners' information needs, including physical and security-related barriers that one would expect to encounter in a prison environment, as well as less anticipated cognitive and affective issues (e.g. low self-esteem, distrust, and fear of stigma) and stress-coping issues which could mean that needs were often not recognised/actioned/met. Prisoners frequently employed self-protective measures, including secrecy and deception, to shield themselves from the potential negative

consequences of sensitive information needs being discovered. Importantly, prisoners' unmet information needs (on a range of topics) appear to be associated with negative repercussions, including detriment to prisoners' mental health, relationships with family, and rehabilitation.

Findings offer insight into key concepts drawn from theories and models of information behaviour in the prison context. For example, there is substantial evidence of contextual influences impacting upon prisoner's information behaviour, offering insight into the influence of activating mechanisms and intervening variables proposed in Wilson's (1997) Revised General Model of Information Behaviour. There is evidence of factors influencing recognition, comprehension, and articulation of prisoners' information needs, offering insight into issues which influence progression of needs between the levels of need (i.e. visceral, conscious, formalised, and compromised) proposed in Taylor's (1968) Question-Negotiation theory. There is also evidence of prisoners engaging in secrecy and deception in response to risks associated with revealing and/or seeking to address sensitive needs, linking to the self-protective information behaviours proposed in Chatman's (1996) Theory of Information Poverty and supporting findings of Chatman's (1999) Theory of Life in the Round, while also adding valuable further evidence and insight into issues which contribute to information poverty in the prison context.

In light of findings, a number of recommendations are made. This includes the recommendation for future research exploring information behaviour in the small world context of the prison, the sensitive context of information need, and potential avenues through which prisoners can be supported to address their sensitive information needs. Recommendations for practical action/policy/change to the Scottish Prison Service include the implementation of information campaigns designed to raise awareness of mental health and associated support services in male prisons, and the expansion of prisoners' current access to technology by extending their currently temporary access to mobile phones and introducing internet access for prisoners studying higher education (with a view to offering internet access more widely in future, for the purposes of communicating with family).

In summary, this research has given voices to those who are rarely heard; a chance for prisoners to express themselves and to air their frustrations and concerns in an environment which is often unconducive to personal and emotional expression. It is hoped that findings of this study are acknowledged and utilised by prisons not only in Scotland, but worldwide, and that recommendations for action/policy/change are given serious consideration with a view to implementation. This would not only improve the day-to-day living of those imprisoned in secure institutions, but also support the smooth running of prisons by reducing the likelihood of emotional and behavioural issues which are associated with unmet needs and recognised as fundamentally contrary to the rehabilitation process.

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Appendix 1: Recruitment notice

Call for participants

Title of study: Exploring the information behaviours of prisoners

Who is the researcher?

This study is being carried out by Cheryl Canning, a PhD student at the University of Strathclyde. The researcher has previously worked as a librarian in three prisons in Scotland.

What is the purpose of this study?

I would like to talk to you about the types of questions you typically have, how you go about getting answers to these, and any problems you encounter in the process of doing so.

Who can take part?

Anyone from the prison population currently serving a prison sentence at HMP Shotts is invited to take part in this research project. There are no additional requirements. Participation in the study is entirely voluntary and will have no impact on prison progression processes.

What if I change my mind?

You are free to withdraw from the study up to two weeks following the date of the last interview you took part in, without having to give any reason and without any consequence. If you choose to withdraw and do not wish for your data to be used, you should inform the researcher who will then remove your data and destroy any information you have provided during interviews.

What will the study involve?

I would like you to take part in two interviews; each expected to last approximately one hour and will be conducted in the Learning Centre at HMP Shotts. I would like to audio-record interviews but if you would prefer, you can request that only written notes be taken.

What if I don't want to answer certain questions?

During interviews, if you do not wish to answer certain questions then you do not need to. You are not obliged to provide any information that you do not feel comfortable disclosing.

How will my information be stored and processed?

Your personal data will be processed in accordance with the provisions of the General Data Protect Regulation (GDPR). Questionnaires and interview data will be stored securely, separate from consent forms, with an anonymous ID attached in place of your name. Data will be stored on a secure drive on the University of Strathclyde network and backed-up on an encrypted USB.

Appendix 1: Recruitment notice (cont.)

Will my information remain confidential?

Your information will treated confidentially and no information that could identify you will be made publically available. While it is possible that quotes you have provided may be used in the final research report, these will be anonymised to further protect your identity. Confidentiality boundaries will only be breached in the event that information disclosed in interviews suggests potential or actual threat to your personal safety or that of others, or threat to the security of the prison, or involves criminal disclosures revealing your involvement in offences for which you have not been convicted or your intent to commit further offences.

What information could be passed on?

Following data analysis the researcher will produce a final report which will be presented to the Scottish Prison Service and a PhD thesis which will be submitted to external examiners for assessment. Academic journals may also be approached for potential publication of research findings. No individual participant will be identified within any of these documents.

What are the potential benefits of the study?

If you choose to share your experiences, this will help contribute to existing academic literature by providing a better understanding of the types of information prisoners need and reasons prisoners may or may not be able to obtain this information. Therefore, it is hoped that the general prison population will benefit from findings of this study and will be better supported to access the information they need. It is also anticipated that outcomes from this study will also help to inform future staff practises within the prison environment.

What are the potential risks associated with participating?

While no risks are anticipated, it is recognised that as a result of discussing your current situation and recalling past events, you may feel that you require support following interviews. Therefore, following interviews you will be provided with a debrief form outlining a number of prison support services you may wish to contact should they be required.

Will I get to see the findings?

Participants will not receive individual feedback. However, a copy of the final research report will be made available to participants upon request.

Who should I contact for further information?

Mrs Cheryl Canning
University of Strathclyde, 26 Richmond Street, Glasgow, G1 1XQ
Telephone: 0141 5524752

Appendix 2: Information sheet

Information sheet

Title of study: Exploring the information behaviours of prisoners

Who is the researcher?

This study is being carried out by Cheryl Canning, a PhD student at the University of Strathclyde. The researcher has previously worked as a librarian in three prisons in Scotland.

What is the purpose of this study?

I would like to talk to you about the types of questions you typically have, how you go about getting answers to these, and any problems you encounter in the process of doing so.

Who can take part?

Anyone from the prison population currently serving a prison sentence at HMP Shotts is invited to take part in this research project. There are no additional requirements. Participation in the study is entirely voluntary and will have no impact on prison progression processes.

What if I change my mind?

You are free to withdraw from the study up to two weeks following the date of the last interview you took part in, without having to give any reason and without any consequence. If you choose to withdraw and do not wish for your data to be used, you should inform the researcher who will then remove your data and destroy any information you have provided during interviews.

What will the study involve?

I would like you to take part in two interviews; each expected to last approximately one hour and will be conducted in the Learning Centre at HMP Shotts. I would like to audio-record interviews but if you would prefer, you can request that only written notes be taken.

What if I don't want to answer certain questions?

During interviews, if you do not wish to answer certain questions then you do not need to. You are not obliged to provide any information that you do not feel comfortable disclosing.

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Appendix 2: Information sheet (cont.)

Will my information remain confidential?

Your information will treated confidentially and no information that could identify you will be made publically available. While it is possible that quotes you have provided may be used in the final research report, these will be anonymised to further protect your identity. Confidentiality boundaries will only be breached in the event that information disclosed in interviews suggests potential or actual threat to your personal safety or that of others, or threat to the security of the prison, or involves criminal disclosures revealing your involvement in offences for which you have not been convicted or your intent to commit further offences.

What information could be passed on?

Following data analysis the researcher will produce a final report which will be presented to the Scottish Prison Service and a PhD thesis which will be submitted to external examiners for assessment. Academic journals may also be approached for potential publication of research findings. No individual participant will be identified within any of these documents.

What are the potential benefits of the study?

If you choose to share your experiences, this will help contribute to existing academic literature by providing a better understanding of the types of information prisoners need and reasons prisoners may or may not be able to obtain this information. Therefore, it is hoped that the general prison population will benefit from findings of this study and will be better supported to access the information they need. It is also anticipated that outcomes from this study will also help to inform future staff practises within the prison environment.

What are the potential risks associated with participating?

While no risks are anticipated, it is recognised that as a result of discussing your current situation and recalling past events, you may feel that you require support following interviews. Therefore, following interviews you will be provided with a debrief form outlining a number of prison support services you may wish to contact should they be required.

Will I get to see the findings?

Participants will not receive individual feedback. However, a copy of the final research report will be made available to participants upon request.

Who should I contact for further information?

Mrs Cheryl Canning
University of Strathclyde, 26 Richmond Street, Glasgow, G1 1XQ
Telephone: 0141 5524752

Who else can I contact for further information?

If you have any questions or concerns during or after the study, or wish to contact an independent person to whom any questions may be directed, please contact:

Dr Steven Buchanan
University of Strathclyde, 26 Richmond Street, Glasgow, G1 1XQ
Telephone: 0141 548 3409

University Ethics Committee
University of Strathclyde, 50 George Street, Glasgow, G1 1QE
Telephone: 0141 548 3707

Appendix 3: Consent Form

Participant ID

Consent Form

Title of study: Exploring the information behaviours of prisoners

- I confirm that I have read and understood the information sheet for the above study and the researcher has answered any questions to my satisfaction.
- I understand that my participation is voluntary and that I am free to withdraw from the study at any time, up until two weeks following the date of the last interview, without having to give a reason and without any consequences. If I exercise my rights to withdraw and I don't want my data to be used, any data which has been collected from me will be destroyed by the researcher.
- I understand that any information recorded in the investigation will remain confidential and no information that identifies me will be made publicly available. However, I understand that the researcher is legally and ethically bound to breach confidentiality in the event that information I disclose in interviews suggests; potential or actual threat to my personal safety or that of others, or to the security of the prison, or involves criminal disclosures revealing my involvement in offences for which I have not been convicted, or my intent to commit further offences.
- I understand that information I have provided may be published in the form of a thesis, journal papers, and other research reports.
- I consent to being a participant in the study.
- I consent to being audio recorded as part of the project (please tick) Yes ☐ No ☐

(PRINT NAME)	
Signature:	**Date:**

Appendix 4: Demographic questionnaire

Participant ID

Demographic Questionnaire

Title of study: Exploring the information behaviours of prisoners

Please answer the following questions to reflect your opinions as accurately as possible and to answer factual questions to the best of your knowledge. If you do not wish to answer any questions then you do need to. Any information you provide will be kept strictly confidential.

1. **What is your age?** ND □

2. **What is your gender?** ND □

   Female □ Male □ Other □

   If other, please describe:

3. **What is your sexual orientation?** ND □

   Bisexual □ Gay □ Heterosexual □ Other □

   If other, please describe:

4. **What is your ethnicity?** ND □

   Arab □ Asian □ Black □ White □ Other □

   If other, please describe:

Appendix 4: Demographic questionnaire (cont.)

5. **a) What is the total length of your current prison sentence in years?** ND □

b) How much time do you have left to serve on your current prison sentence in years? ND □

c) Please tick the box which best describes the nature of your crime or offence. ND □

Main category	Sub-category	
Non-sexual crimes of violence	Homicide	
	Attempted murder	
	Serious assault	
	Other	
Sexual crimes	Rape	
	Attempted rape	
	Sexual assault	
	Other	
Crimes of dishonesty	Housebreaking	
	Theft	
	Fraud	
	Other	
Fire-raising, vandalism, etc.	Fire-raising	
	Vandalism	
	Other	
Other crimes	Crimes against public justice	
	Handling offensive weapons	
	Drugs	
	Other	
Miscellaneous offences	Common assault	
	Breach of the peace	
	Drunkenness and other disorderly conduct	
	Other	
Motor vehicle offences	Dangerous and careless driving	
	Driving under the influence	
	Speeding	
	Other	

d) Is this your first prison sentence? Yes □ No □ ND □

If no, how many times have you been in prison before?

And, if known, how many years in total have you spent in prison?

Appendix 4: Demographic questionnaire (cont.)

6. **a) What is the highest education qualification you obtained before coming into prison?** ND □

No qualifications □ Standard Grade □ Higher □

Advanced Higher □ College Certificate □ College Diploma □

Undergraduate degree □ Postgraduate degree □ Doctorate □

b) Have you completed any qualifications during your sentence? Yes □ No □ ND □

If yes, please list qualifications: _____

7. **What was your employment status before coming into prison?** ND □

Employed full-time □ Employed part-time □ Self-employed □

Unemployed □ Student □ Carer □

If employed, please provide job title: _____

8. **What was your accommodation status before coming into prison?** ND □

Owner-occupier □ Private rented □ Council tenant □

Living with parents □ Homeless □ Other □

If other, please describe: _____

9. **a) What was your relationship status before coming into prison?** ND □

Married □ Dating □ Divorced □

Widowed □ Single □ Other □

If other, please describe: _____

b) Has your relationship status changed since coming into prison? Yes □ No □ ND □

If other, please describe current status: _____

10. **Do you have any children?** Yes □ No □ ND □

If yes, please provide further details below:

Age of child (in years)						
Are you in contact?						

Appendix 5: Interview schedule

Interview Schedule

[Interview schedule will total 120min. conducted across two 60min. sessions]

INT 1.

Thank you for your interest in participating in my research.

My name is Cheryl Canning. I'm currently a PhD student at the University of Strathclyde, and I have previously worked as a librarian in three Scottish prisons. I would like to begin by discussing what my research is about, and what participation would involve. If you're still happy to proceed we will then complete consent forms.

2 min

Step 1. Participant presented with information sheet (see appendix 2) and given verbal walkthrough of the information contained within by the researcher. Following this, participants will be asked whether they have any questions or are unsure of any aspects of the research to ensure they fully understand the nature of the research they are being asked to take part in.

7 min

Step 2. Participant will be presented with a copy of the consent form (see appendix 3) and given verbal walkthrough of the information contained within by the researcher, and then if willing, asked to sign and date the form as evidence of their informed consent to participate in the research.

10 min

Thank you for agreeing to be interviewed.

I would now like to ask you some questions about yourself, followed by questions about the types of information you need, the sources you seek information from, and if anything helps or hinders you from finding information in the prison. There's no right or wrong answers – I'm simply interested in your own opinions and views. Also, please remember that you do not need to answer a question if you do not wish to - simply ask me to move on to the next question.

12 min

Is there anything that you would like to ask before we begin?

Step 3. Participants will be asked to complete a demographic questionnaire (see appendix 5) with questions asked and answers recorded by the researcher (printed sheet).

32 min

Step 4. The researcher will move on to semi-structured interview questions as per below, and planned to occur across two sessions. Questions 1-3 may be asked in multiple iterations (indicated by arrow) to capture multiple examples of information need and seeking behaviours. While the overall nature of questions will remain as outlined below, the researcher may adapt the language used in questioning based on individual participants' levels of comprehension. Example prompts (e.g. example information needs/sources) will support discussion if required. Sub-aspects of each question are also detailed below (where applicable) to illustrate key data sought by the researcher (and may be asked if not forthcoming or clear in initial participant responses).

Appendix 5: Interview schedule (cont.)

INT 2.

1. **Can you give me an example of something that you wanted to know about/wanted information on?**
   a) What questions did you have/what information did you need?
   b) Why did you need this information?
   c) How important was this need on a scale of 1 to 5? [Scale 1]

2. **What did you do about this need for information?**
   a) Where did you look for answers/information?
   b) Why did you use these information sources?
   c) If nothing, why?

3. **What was the outcome?**
   a) How satisfied with the information that you obtained on a scale of 1 to 5? [Scale 2]
   b) If not entirely, why?

55 min — *Repeat questions 1-3 if participants have further examples to discuss.* — 10 min

4. **In general, when looking for information, what helps?** — 20 min

5. **In general, when looking for information, what hinders?** — 30 min

6. **Have you ever had a question that you have wanted to ask but felt unable to?**
   a) If yes, would you be willing to share with me (and absolutely fine if prefer not to). If yes:
      i. What was the topic or question?
      ii. How important was this need on a scale of 1 to 5? [Scale 1]
      iii. Why didn't you feel able to ask/share this need?
      iv. What was the outcome?
      v. How did it make you feel?
      vi. What might have helped?
      vii. Do you think other prisoners behave/feel this way? — 55 min

Thank you for your time and for sharing your thoughts.

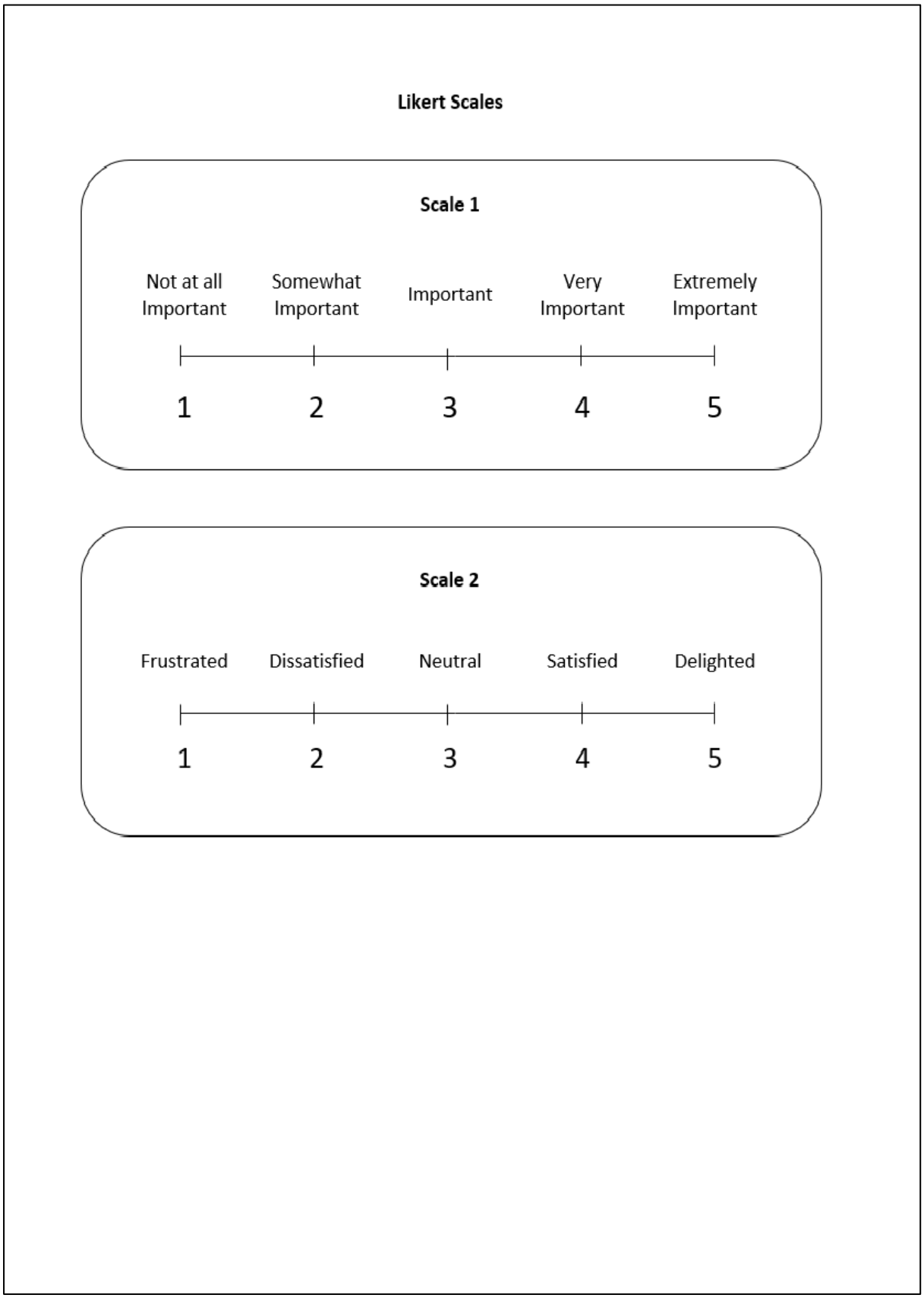
Is there anything you would like to ask or wish to add before we finish?

Appendix 5: Interview schedule (cont.)

60 min	**Step 6.** Participants will be presented with a debrief sheet (see appendix 6) and asked if they have any questions which they did not wish to ask during the recorded portion of the interview. Participants will also be given the opportunity to rescind permission to the data provided during the interview or to request that certain aspects of the interview be omitted from data analysis.	60 min

**** END OF INTERVIEW ****

Appendix 6: Likert scale for interviews



Appendix 7: Debrief sheet

Debrief sheet

Title of study: Exploring the information behaviours of prisoners

What study have I just taken part in?

This study asked you to talk about the types of questions you typically have, how you go about getting answers to these, and any problems you encounter in the process of doing so.

What happens to the information I have provided in interviews?

If you have any questions relating to how the information you have provided will be stored, processed, or used please refer to the information sheet, or speak with the researcher.

What if I decide that I no longer wish to take part?

Please remember you are able to withdraw your data at any point up until two weeks following the date of the last interview you took part in.

Will I be able to see the results of this study?

A summary of findings from this research will be presented in a research report. You may request a copy of this report by contacting the researcher following completion of the study.

What if interviews have left me feeling that I require support?

Please speak to the researcher who can help signpost you to the appropriate service providers. Or, you may wish to contact one of the following bodies for assistance at HMP Shotts:

- **Multi-Faith Centre**: offer spiritual advice and guidance on personal matters regardless of your religious beliefs or background.
- **Samaritans**: 24-hour helpline run by volunteers for anyone who wishes to have a private conversation about personal difficulties. Contact free phone number on 116 123.
- **NHS Mental Health team**: trained mental health professionals who can offer advice and support on dealing with mental health issues such as anxiety or depression.

Who should I contact if I have any further questions about the research?

Mrs Cheryl Canning
University of Strathclyde, 26 Richmond Street, Glasgow, G1 1XQ
Telephone: 0141 5524752