Understanding the post-release technology experiences of women ex-prisoners: Do they have the access and literacies to support employment and study?

Project report

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Executive summary

This report provides an overview of findings from a qualitative research project that investigated women ex-prisoner's lived experiences of technology in the period following their release from prison. The project was driven by four research questions, of which the first is considered the primary research question:

1. To what extent do post-release women ex-prisoners have the digital literacies they need to find employment and reintegrate into society?
2. What are the technology needs of post-release women ex-prisoners?
3. What are the technology experiences of post-release women ex-prisoners?
4. What access do post-release women ex-prisoners have to digital technologies?

Methodology

In a three month period from June to August 2019, twenty interviews were conducted across Southeast Queensland with women who had been released from prison in the 12 months before their interview took place.

Of the participants, 20% had been recently released from their first sentence, 10% had been in prison twice, 30% indicated their most recent incarceration was 'not the first time', and 40% were multiple recidivists who did not disclose precisely how many times they had been incarcerated. Sentences ranged from two months to six and a half years, with four to six months being the most common length of time spent in prison. Participant recruitment and data collection was a significant challenge for this project.

The sole data collection strategy for this project was in-depth, semi-structured interviews. Interviews with participants were recorded and transcribed. Descriptive analysis was used to systematise the lived experiences and address questions of digital literacies. Thematic analysis was used to identify experiences and needs. Finally, behavioural archetypes were developed to present a synthesised view of the findings that can inform service delivery.

Findings

Digital literacy of the cohort

The digital literacy of participants fell into four categories:

1. No or limited capability to use technology as part of living, learning and working in a digital society, and no or limited interest in developing capability.
2. Limited capability to use technology as part of living, learning and working in a digital society, with an interest in developing capability.
3. Capability to use technology as part of living, learning and working in a digital society, with an interest in further developing capability.
4. High level of capability to use technology as part of living, learning and working.

Technology needs and experiences

Women recently released from prison have a range of technology needs and experiences:

1. Re-establishing life in the community: This is a complex need that is partly mediated by technology. The complexity of this task occupies women's time and attention, and may prevent them from engaging with technology, or pursuing activities (like job seeking) that require technology engagement.
2. Mediation of technology experiences and access to technology: Women's access to technology is mediated in a variety of ways, including: being influenced by a third party to not use technology or specific platforms; having a third party undertake some or all of their technology interactions; having a third party undertake set up of accounts or connections, which are then managed by the individual, often with ongoing assistance from a third party; and/or having a third party provide support or instruction.
3. Types of technology experiences: Women ex-prisoners use technology: to seek social connection; to manage finances; to access entertainment; at work; to seek employment; as part of their parenting

Barriers and enablers

Participants experienced the following barriers to effective use of technology:

- Preoccupation with other pressing concerns
- Low level of technology skills and knowledge
- No or limited understanding of the relevance of technology in their lives
- Inability to keep up with the pace of change
- Lack of access to suitable devices
- Lack of access to a reliable internet connection with sufficient data
- Difficulty learning from others / inability to access other to learn from.

Participants experienced the following enablers to technology use:

- Money
- Stable housing
- Confidence
- A trusted partner
- Capacity to make social connections
- Good or well-managed mental health
- People willing to spend time with the person to teach them

Archetypes of women ex-prisoners as technology users

In addition to the narrative findings presented in previous sections, the findings have been synthesised into a series of four archetypes of women ex-prisoners as technology users.

These archetypes provide a concise but reasonably complete overview of the digital literacy, technology needs, and technology experiences of the cohort.

Four archetypes of technology-using behaviour were developed:

1. Active avoider
2. Reluctant user
3. Adaptive learner
4. Confident user

Designing education programs based on these archetypes can help deliver digital literacy training in a more targeted and engaging manner as recommended by the literature.

Discussion

The primary research question driving this project was: *To what extent do post-release women ex-prisoners have the digital literacies they need to find employment and reintegrate into society?* This question makes three assumptions:

1. That women ex-prisoners are looking for work in the period immediately after their release
2. That women ex-prisoners may be seeking work that requires them to use technology
3. That digital literacy is or should be a priority development area for this cohort.

In reality, none of the participants in this study were employed at the time of their interview and very few were looking for work. They were preoccupied with reintegration, juggling their complex life circumstances, and managing mental and physical health concerns, which in many cases means they were not in a position to be seeking employment. Further, those participants who were looking for work or wanted to look for work in the future are limited in terms of the job opportunities available to them because of their criminal record. It is unlikely that many of them will seek work that requires technology skills. Once their immediate need for access to a mobile phone is met, technology is not a pressing concern for women who have recently been released from prison.

Digital literacy, however, has a broad impact on women's experience of reintegration. As evidenced in the findings from this project, women ex-prisoners have a range of needs that can be met – in full or part – through engagement with technology. These include a need to: connect socially; manage personal finances; access entertainment; and engage in parenting-related activities.

Women ex-prisoners may not need digital literacies to find employment, because they may not be looking for work. However, digital literacy can support them in reintegration more

generally because it can facilitate improved technology experiences in other areas of their lives.

The areas of greatest need are understanding the relevance of technology in their lives, and training in using technology for basic needs, social connections, job-seeking and managing finances.

Technology is important to women's lives even if it is not closely related to the ways in which they find work and the type of work that they do. Using technology has an impact on the ways that they integrate back into society and begin to rebuild relationships and lives. Our research identified significant barriers to technology use including low knowledge and skills, that technology is not prioritised or even recognised as relevant, problems around access to devices and data, and lack of explicit teaching and support in digital skills. We identified enablers of technology use such as adequate income, stable housing, confidence, social connections who can support and help technology use, and good mental health. Listening to women's stories of how they use technology in their lives enables us to realise how important technology is to re-integration following prison and the need for digital literacies and differentiated training.

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1 Introduction

This report provides an overview of findings from a project that investigated women ex-prisoner's lived experiences of technology in the period following their release from prison. The project was driven by four research questions, of which the first is considered the primary research question:

5. To what extent do post-release women ex-prisoners have the digital literacies they need to find employment and reintegrate into society?
6. What are the technology needs of post-release women ex-prisoners?
7. What are the technology experiences of post-release women ex-prisoners?
8. What access do post-release women ex-prisoners have to digital technologies?

The project, funded by a Queensland Corrective Services Research Grant, was situated in Queensland and undertaken in 2018-2019 by a team of researchers from the University of Southern Queensland's Digital Life Lab. It applied a qualitative research approach to explore the lived experience of the participant group.

This report provides an overview of the project and is structured as follows. Firstly, we present a review of relevant literature. The depth of the review was limited by a lack of relevant published research and the review establishes the need for the study. Secondly, we provide an overview of the research methodology, including approach to data collection and analysis, and an overview of the sample. Thirdly, we present the findings of the research, with a focus on participants' digital literacy, access to technology, and technology related needs and experiences. The findings also include four behavioural archetypes of women ex-prisoners, which provide a concise overview of the range of experiences that occur across the dataset. Following the findings, we provide discussion on two key areas of insight, and conclude by highlighting future directions for research.

2 Literature review

In this section, we present the findings from a review of the literature related to women ex-prisoners' digital literacy, technology experiences, and technology needs. There is a very limited body of research related explicitly to the technology experiences of women ex-prisoners, or ex-prisoners more generally. This literature review therefore draws on literature in related fields of study, primarily prison education. In examining this literature, we have focused on impact of education on employment (given digital literacy for employment is a key part of the primary research aim for this project) and recidivism (as repeated periods of incarceration result in further periods of 'digital disconnection', which may impact on digital literacy). We begin with a discussion of prison education generally, and then move onto a discussion of 'digital disconnection' and effective digital literacy training in the prison context.

2.1 Prison education: impacts and focus

2.1.1 Education and recidivism

There is not much evidence of the effect of Vocational Education and Training (VET) education on re-offending in Australia. Giles and Wade (2016) found that 'the more classes that were successfully completed or involved up-skilling, the shorter time the ex-prisoners spent on welfare in the immediate post-release period' (p.xiii). Evidence from the United States suggests education and work support programmes have a more significant impact on recidivism for older offenders. An Australian study showed that for every additional year in age there was a 5% increase in the likelihood an offender would not return to custody within 2 years (Cale et al., 2018, p.7). Successful completion of a VET programme meant participants were '2.12 times more likely to remain custody free at five years post-release' (that is, 78.23% of prisoners who completed VET study remained out of prison at five years post-release) (p.7). Female prisoners' likelihood of remaining out of custody increased when education was supplemented with age-appropriate behavioural programmes and decreased with risk level (Cale et al., 2018, p.7).

2.1.2 Education and employment

A 2017 meta-analysis found 'five employment studies identified that education in prison settings has a positive impact on employment. Overall, odds ratios indicated a 24 per cent increase in likelihood of gaining employment if the prisoner engages in prison education' (Ellison et al. 2017, p. 108). However, the meta-study does not look at best practices for education in prison settings or differentiate the factors leading to successful employment outcomes. Ellison et al. concluded:

> it is not possible to discern whether education acts as a catalyst for change or an enabler for change. With respect to employment, we do not know if it is the skills gained, the qualifications acquired or the intangible benefits of education (e.g.

> greater confidence and articulacy gained through education that secured work) that have most effect (2017, p. 124).

A qualitative study in Spain argued that digital literacy education in particular is a 'powerful tool for social-educative integration and personal transformation' but that they were uncomfortable generalising this to the entire prison population (Paloma and Ignacio, 2019, p. 105).

Findings suggest that women are less likely to participate in VET programmes and more likely to participate in other education programmes, because VET education within prisons is 'heavily characterised by gender stereotyped content' (Cale et al., 2018, p.13). Similarly, women are more likely than men to be disadvantaged by leaving custody with a criminal record because they are disproportionately represented in caring industries, many of which require police checks (nursing, teaching, childcare and so forth) (Wyld, Lomax and Collinge, 2018). It is important to develop skills that will give them work opportunities in areas where their record will not hinder them.

Any education programs provided need to be engaging and relevant for 'actual employment prospects in the communities to which prisoners are released' (Cale et al., 2018, p.14). Training undertaken in prisons needs to be 'meaningful and appropriate' for prisoners and aligned with 'the broader employment opportunity structure they will engage with post-release' (Cale et al., 2018, p.14). Sitnik (2019) argued that the 'success of programming will be determined by whether the individual goals of women are achieved, in opposition to quantitative measures and assumptions of successful educational and skills programs, based upon governmental and organization targets' (p. 65).

It is also important to bear in mind that many prisoners enter the system with poor academic records and poor experiences with education (Pike and Adams, 2012). The 2019 Women in Prison report stated that '[m]any women entering prison have poor employment histories, limited education, and lower literacy levels than the general Australian population' (Anti Discrimination Commission Queensland, 2019, p. 151).

2.1.3 The problem of generalised training

'One size fits all' education models in prisons do not suit individual learning styles and may not be educationally appropriate (Allen, 2016). This may be especially relevant for digital literacies training, where there may be age-related differences in digital capabilities and different needs for technology. For example, a prisoner who has used computers in high school may have a very different level of digital literacy than someone who may never have been exposed to or needed to use digital technology. Allen's (2016) central recommendation is that support for young women should be differentiated from that provided to the general women prison population, and the overall prison population.

2.1.4 Post-release training

There is a small body of literature that deals with training for ex-prisoners after their release from prison. Grace, Malone and Murphy (2016) found that to be effective, post-release training programs need to be integrated into a comprehensive package of post-release services. Their research found that women were only able to engage in the type of training they needed for long-term employment success if they had general support, housing and assistance finding employment. Sitnik referred to women's 'double stigmatization [sic]' as being 'both criminalized [sic] and a woman' (2019, p.61) and argued that education opportunities cannot benefit women 'when basic needs such as housing, employment, and family obligations are not met' (p.66). Snodgrass et al. (2017) suggest that career training needs to include interpersonal skills and to be embedded within post-release support especially around substance abuse. Wyld, Lomax and Collinge (2018) similarly argue that women need comprehensive support and, specifically, five assets to avoid crime post-release: safety from violence; appropriate housing; good mental and physical health; financial independence and employment; and access to appropriate services.

2.2 'Digital disconnection'

Depending on their age and level of education, many women enter prison with some level of exposure to and knowledge of technology. However, they face a period of 'digital disconnection' (of two years on average), where their skills are not refreshed and they are not exposed to new technology developments (Hopkins and Farley, 2015; Huijser, Bedford, and Bull, 2008). As a result, ex-prisoners may have some level of digital literacy but their digital skills may not be current on release. Spanish research found that '[t]he digital divide [felt by ex-prisoners] makes it difficult to integrate people into the labor market, leading them to social exclusion' which in turn leads to poor living and working conditions (Aurora and Agúndez, 2019, p.86).

Technology is widely seen to be bringing about socio-economic transformation. Agúndez-Soriano and Cuevas-Cerveró (2019) argue that incarceration not only deepens the digital divide but is especially significant for women prisoners who are particularly vulnerable to social and economic isolation. Ana et al. (2019) focuses on the need for prisoners to learn technology tools in order to be able to integrate socially and economically on release. In an United Kingdom review of prison education, Dame Sally Coates concluded that '[i]f prisoners are, on release, to secure employment, continue to study, or otherwise contribute to society, they must be given the opportunity to use and improve their digital skills in prison' (2016, p.4).

Reisdorf and Jewkes (2016) also identify the effects of digital disconnection and focus on the question of how to help prisoners maintain or expand digital skills so they are not socially isolated on release. A key finding in their work highlighted that prisoners often do not realise the importance of being digitally literate, especially if they have been incarcerated long-term. Prisoners and prison staff often also considered digital disconnection as less important than other social deprivations.

2.3 Effective digital literacy training in the prison context

Digital literacy training needs to be taught through content designed specifically for adult learners, with in-person tutor support, and self-pacing with own goal setting to promote autonomy (Castek and Jacobs et al., 2015; Withers, Jacob et al., 2015). Castek and Jacobs reported on a program at Orleans Parish Prison that operates a ten week re-entry focused curriculum, with one week spent on digital literacy acquisition. 700-900 prisoners each year complete the program. There has been a 47% decrease in recidivism since the re-entry program started (that is, over a period of three years) (Castek and Jacobs et al., 2015). The program focuses on keyboard and mouse skills, internet navigation, filling out online applications, creating and sending resumes, creating an email account, sending and receiving emails, and effective online searching. Reisdorf and Jewkes (2016) that digital literacy training for prisoners must also deal with a range of skills beyond these basics, including those related to using touchscreen technology, Skype, Word, Excel, Powerpoint, social media. They also suggested training should cover topics like starting a business, developing a website, and starting an eBay shop.

Digital literacy training also needs to focus on complementary and related skill sets. The program reported on by Castek and Jacobs et al. (2015) included related soft skills that are explicitly taught include self-efficacy, confidence, competence, self-regulation and autonomous behaviours. The program also included fellow prisoners with more advanced technical skills as mentors, with the specific aim of learning about how to offer, ask for and receive support. Crabbe (2016) discusses the need for an enquiry- and skills-based approach to prison education to address proficiency gaps. Crabbe argues that building communication skills is central to enhancing employability, and advocated for teaching about norms and expectations around using appropriate language, following instructions, and contributing to meetings. Crabbe suggested courses should be short, focused and generate certificates that can be shown to employers or educational institutes.

Farley and Pike (2016) argue that the benefit of specific digital literacy learning is not only related to digital literacy development. It also has wider impact on development of skills needed for social and economic success post-release. These learning experiences can enable ‘prisoners to gain the cognitive and social skills they need for further study or work

upon release from custody, while promoting prosocial behaviour and identity, potentially for desistance and for better societal integration' (p. 69).

2.4 Conclusion

Our review of the literature revealed a considerable gap in research related to the technology experiences and digital literacy of women ex-prisoners. Further, there is a lack of research about the types of jobs that women ex-prisoners are likely to be able to secure, and to what extent they need digital skills to enable them to find and apply for work, or effectively fulfil the requirements of their job.

However, there are some insights in the literature that are worthwhile considering in the context of this project:

- 'Digital disconnection' is a real concern that has a significant impact on women ex-prisoners' digital literacy.
- There is evidence to suggest that digital literacy training in the prison context can support prisoners in preparing for release, reintegrating into society and redressing some of the impact of 'digital disconnection'.
- Digital literacy training in any context should address more than technology skills. It must also address soft skills, including communication and relationship management skills.
- 'One size fits all' training is not effective in the prison context. This may be particularly true of technology training, where age and length of incarceration may impact significantly on differences in starting skill levels.
- Training in the prison context should be tailored to focus on the needs of the individual, and the functions of jobs they are likely to be eligible for on release.
- Training that occurs after release from prison needs to be part of a package of post release support provided to the ex-prisoners to ensure their basic needs are met.

3 Methodology

In this section, we provide an overview of the methodology for this project. We begin with an overview of the participants, including recruitment strategies and the characteristics of the sample. We then provide an overview of the approaches to data collection and analysis.

3.1 Participants

Participants in this study were women living in Southeast Queensland who had been released from prison within 12 months of data collection.

3.1.1 Recruitment

Participants were recruited through distribution of flyers and posters via Probation and Parole Offices in Southeast Queensland. The Queensland Corrective Services Research Office contacted Probation and Parole Offices to identify staff who were willing to assist with distribution of recruitment materials.

As with all projects of this nature, participant recruitment was a challenge. Women recently released from custody have many concerns and needs, and taking part in a research study is not a priority. Depending on the length of incarceration and the context into which they are released, they may be looking for accommodation, regaining custody of children, negotiating relationships and health concerns, navigating complex bureaucracies, meeting the requirements of reporting to parole officers, and striving to live day to day.

We had difficulty recruiting a sufficient number of participants within the original inclusion criteria, which focused on women who had been released from prison within six months of their interview taking place. Contractual and ethical clearance was received to extend the sample to women released in the twelve months prior to the interview. In addition to difficulty in booking a sufficient number of interviews, we also experienced a high 'no show' rate, which is understandable given the pressure women who are recently released from prison may be under. We scheduled approximately 40 interviews, with around half of these being 'no shows'.

3.1.2 Sample

In a three month period from June to August 2019, twenty interviews were conducted across Southeast Queensland with women who had been released from prison in the 12 months before their interview took place.

Of the participants, 20% had been recently released from their first sentence, 10% had been in prison twice, 30% indicated their most recent incarceration was 'not the first time', and 40% were multiple recidivists who did not disclose precisely how many times they had been incarcerated. Sentences ranged from two months to six and a half years, with four to

six months being the most common length of time spent in prison. Two participants volunteered that they had juvenile records, one saying: *since I was about maybe 12 or 13, I've been locked up in juvie…so, I think I worked out in the last nine years, I've probably been out probably a year, out of that whole nine years.* (Participant 2) Another woman revealed she has only been out of prison for one of her eight year old son's birthdays. Most of the first-time offenders had short sentences and did not feel that technology had changed much during their time of incarceration.

Participants ranged in age from their early 20s to sixty plus. Some were currently partnered. Others had been partnered at the time of incarceration, but their relationships had broken down over the term of imprisonment. Many had children, ranging in age from a newborn to adult, living with them or not. Some cared for grandchildren or nieces/nephews in addition to their own children. Three of the women were pregnant at the time of the interview. Complicated relationships and issues over custody and who was entitled to receive Centrelink payments on behalf of the children dominated financial concerns.

The educational experience of the participants varied widely. Roughly a quarter of participants had completed 12 years of education and of these, some had completed Certificate III TAFE courses prior to incarceration. Just under half of participants had completed Grade 10 and 11, and most of the remaining participants had not gone past Year 9 in school, with one participant only completing up to Grade 7. Some participants had used computers at school, others had not. 40% (8) participants had specifically learnt how to use computers at school while 60% (12) had not learnt any digital literacy skills at school. One participant had built a computer from scratch as part of their schooling. Lack of experience with technology at school was sometimes attributable to the age of participants, and in other cases, attributable to the age at which they left school.

Mental health was a crucial element of the women's experiences with seven of the twenty women interviewed mentioning mental health issues, from depression to bi-polar disorder, without being directly asked about them. For these women, mental health concerns had a direct impact on their ability to look for work, and at least three of the participants were on Disability Support Payments for severe mental health issues.

Many people do not go directly to employment on release from incarceration or supervision: 'Only a small proportion of dischargees (16%) had organised paid employment that would start within two weeks of release' (Queensland Sentencing Advisory Council, 2019, p.30). This is echoed in our cohort, with none of the participants being employed at the time of their interview, and less than a third looking for work (Table 1).

Work seeking status	% (#)
Looking for work	30% (6)
Not looking for work	40% (8)
Studying	10% (2)*
Pension, NDIS, Parenting Payment, Workcover, other support payment (excluding Newstart)	25% (5)

Table 1: Work seeking status at time of interview
**Does not add up to 20 or 100% due to participants falling into multiple categories.*

3.2 Approach to data collection

The sole data collection strategy for this project was in-depth, semi-structured interviews. Interviews followed an indicative interview discussion guide (Appendix A), with probing questions used to elicit explanatory information and prompt participants to unpack their experiences.

Interviews were conducted face-to-face at Probation and Parole Offices across Southeast Queensland. Participants were aware that security cameras were operating (although they were not recording). They were also aware that the interview was being audio recorded and transcribed but their name would not be attached to their comments, nor would their comments be disclosed to Probation and Parole staff. Some participants combined participation in an interview with attendance to a routine check-in. Others came specifically for the interview. Due to the interviews being located in the Probation and Parole Offices, and that recruitment materials were distributed via the Offices, it is highly likely that participants' willingness to answer questions honestly and openly was impacted by the interviews taking place in the Office. For example, given reports that Probation and Parole Officers strongly discourage participation in social media, some participants may not have felt comfortable talking about their use of social media.

Interviews ranged in length from eight to forty minutes, largely dependent on a participant's ability and willingness to answer the interview questions. Participants who had higher levels of digital skills tended to have longer interviews simply because they had more experiences to talk about. Some participants had external time pressures and could only stay for a short period. In these instances, we moved more swiftly through the protocol. Another factor that impacted on interview length and depth was the presence of children: some participants had children with them during the interview.

3.3 Approach to data analysis

Two analysis strategies were used to develop findings from the data.

Firstly, a descriptive analysis of demographic and other participant characteristics was undertaken to inform the cohort profile presented in this methodology section, as well as the production of the archetypes. Characteristics were tabulated for each participant in combination with key quotes related to their technology experience.

Secondly, experiences and needs occurring across the dataset were analysed using a modified version of Braun and Clarke's (2006 approach). This approach has five key stages:

1. Familiarisation with the data through reading and re-reading transcripts, and noting down initial impressions of possible themes.
2. Generating initial codes by working systematically through the entire data set and applying codes to segments of data.
3. Searching for themes by gathering related codes and data into potential themes.
4. Reviewing themes to ensure they fit and work by comparing themes with the data.
5. Defining and naming the themes through continued analysis that defines the boundaries of the themes and effectively describes the range of experiences within them.

3.4 Development of the archetypes

A qualitative synthesis of experiences was undertaken to develop behavioural archetypes that represent the range of participant experiences with technology. Drawing on a methodology for the development of behavioural archetypes (Smashing Magazine, 2017), we identified recurring experiences across the dataset and, based on these, developed four narratives to inform the development of the archetypes. Through further qualitative synthesis of the data, the archetypes were fleshed out to develop a complete picture of 'who does what, …why' (Smashing Magazine, 2017, 3) and how. The resulting archetypes provide insight into the behaviours, practices and experiences of the cohort.

3.5 Ethical clearance

This project was approved by the University of Southern Queensland Human Research Ethics Committee (approval number H18REA291). All participants in this study provided informed written consent to participate in the research.

4 Findings

4.1 Introduction

This project was driven by four research questions:

9. To what extent do post-release women ex-prisoners have the digital literacies they need to find employment and reintegrate into society?
10. What are the technology needs of post-release women ex-prisoners?
11. What are the technology experiences of post-release women ex-prisoners?
12. What access do post-release women ex-prisoners have to digital technologies?

In this section, we draw on 20 interviews with women who have been released from prison within the last 12 months to explore these questions in turn. We begin with a discussion of the level of digital literacy across the cohort. Next, we explore their technology experiences, including their access to technology, the types of experiences they have, and the ways these experiences are mediated. We then examine their technology needs, before concluding with a discussion of the intersection between digital literacy, technology experiences, access and needs. In this concluding section, we highlight where there is a gap between what women ex-prisoners need in terms of access, skills, knowledge and mindsets, and their actual access, skills, knowledge and mindsets. In this final section, we return to the first research question, and consider whether women ex-prisoners have the digital literacies they need to find employment and reintegrate into society.

4.2 Digital literacy

This project was driven by the primary research question: To what extent do post-release women ex-prisoners have the digital literacies they need to find employment and reintegrate into society? This is a complex question, and to begin to answer it, we must start with a discussion of the cohort's digital literacy. This in itself is a complicated discussion, as digital literacy is a complex phenomenon, and the level of digital literacy across the cohort varies widely.

4.2.1.1 Defining digital literacy

Digital literacy is comprised of the skills, knowledge and attitudes that fit an individual to live, learn and work in an increasingly digital society (derived from Jisc, 2014). A significant amount of the definitional work related to digital literacy has come out of the higher education sector, and one of the earliest frameworks for digital literacy, which has been widely adopted and adapted in Australia, is that of Jisc. The Jisc definition comprises six elements:

- ICT proficiency
- information data and media literacies
- digital creation, problem solving and innovation

- digital communication, collaboration and participation
- digital learning and development
- digital identity and wellbeing (Beetham, 2017).

In this model, ICT proficiency informs and underpins the other five elements. Digital literacy does not exist in isolation, but is informed and influenced by many factors, including:

- functional literacy
- critical thinking
- creativity
- personal ethics
- communication, interpersonal and relationship management skills.

As this definition evidences, digital literacy is a complex phenomenon, comprised of and influenced by many factors other than the ICT proficiency that is often equated with the term 'digital literacy'.

4.2.1.2 What does 'digital literacy' mean in the context of this study?

For participants in this cohort, digital literacy may be considered as the skills, knowledge and attitudes that allow women ex-prisoners to live, learn and work in an increasingly digital society. 'Living' might be considered to be about re-establishing oneself on release from prison, completing everyday life functions like managing finances (including engaging with Centrelink, paying bills, and managing personal banking), engaging with their children's school, keeping themselves and/or their children entertained, managing personal relationships, staying safe online, and so on. 'Learning' may be about formal learning (for example, undertaking certificate or diploma courses, or undertaking short courses related to personally relevant topics like addiction), or informal learning. 'Working' relates to seeking work, applying for jobs, and undertaking the responsibilities of their job.

For this cohort, digital literacy is influenced by a range of factors, including health and wellbeing, economic context, social context and more.

In the following sections, we address the way this cohort experiences digital literacy, and consider the barriers and enablers that impact on their digital literacy.

4.2.2 Digital literacy of the cohort

Digital literacy is something that is experienced on an individual level, and it can be difficult to define an abstract conception of the digital literacy of a cohort. Indeed, digital literacy for this cohort varied widely. As experience researchers, our focus was on how digital literacy was experienced by the cohort, rather than on quantifying or measuring how 'digitally literate' each participant was. Further, our interviews tended to be very short, and it was not feasible to explore the six elements of digital literacy and gauge how each participant experienced each element. Instead, in analysing the data, we focus our analysis on

developing an understanding of whether the recounted experiences of the participants evidenced a capability to use technology as part of living, learning and working in a digital society. From analysis of the conversations we had with participants, we identified four categories of digital literacy experience. Each of the participants in the study 'fits' into one of these categories.

As we explored the digital literacy of the participants through the analysis process, we identified that across the data, digital literacy is experienced through, and influenced by, the interaction between four factors:

1. Technology skills and knowledge (or ICT proficiency)
2. Confidence in engaging with technology
3. Understanding of the relevance of technology in their lives (relevance perception)
4. Interest in engaging with technology.

In the following sections, we explore each of the categories of digital literacy experience, as well as the influence and interaction of the four factors listed above that occur in each category. It is important to note that even within these categories, participants' experiences varied.

4.2.2.1 Category 1: No or limited capability to use technology as part of living, learning and working in a digital society, and no or limited interest in developing capability

I don't really understand it. I don't - well, obviously because I've been in jail my whole life really. It's just something that I don't, it doesn't function in my head. It's not - because when you're in jail, you don't have any technology, you know what I mean? (Participant 2)

I don't know [how to look for a job or what technology I need to know about] because I've never worked before...I don't even know what there is on there to learn, really. (Participant 7)

I don't want to learn about technology, not really. (Participant 8)

Many of the participants who might be considered to belong to this category avoid using technology or rely heavily on a third party to mediate their access. They tend not to have the level of digital literacy needed to undertake the functions of everyday life, but also tend to be able to work around this with support from partners, families and services. This is not to say, however, that they would not benefit from an increase in any or all of the four factors. For example, reliance on third parties may result in a level of social, financial and emotional risk that could be minimised by improved digital literacy, which would make participants less reliant on third parties. Risk is defined here as being:

- Disinterested risk: that is, a third party with no particular vested interest in benefitting, but also no particular interest in ensuring that best practice or best interests of the person being helped are foregrounded such as a job agency or community sector worker.
- Interested risk: a partner who might benefit either directly from access to resources or indirectly through having a partner psychologically, emotionally or economically dependent on them to access resources.

Women in this category have a low level of skills aligned with low confidence in using technology, a lack of understanding of the role of technology in their lives, and a lack of interest in using technology. For this group, the lack of interest may be compounded by lack of skills and confidence, as well as a lack of understanding of the relevance of technology to them personally.

4.2.2.2 Category 2: Limited capability to use technology as part of living, learning and working in a digital society, with an interest in developing capability

I'd just like to get on that and go in on a computer and look at things like everybody else does. That would be good experience. (Participant 17)

Women who might be considered to belong to this category tend to have a good understanding of how technology might positively impact on their lives, and a high level of interest in using technology. However, their low skills and low level of confidence impact on their capability to engage with technology, and can dampen their interest. They may be able to complete tasks using technology when supported by friends or family, but are unlikely to be able to independently undertake everyday life functions using technology. They see the relevance of technology in their lives and are interested in using technology and improving their skills.

4.2.2.3 Category 3: Capability to use technology as part of living, learning and working in a digital society, with an interest in further developing capability

Look the internet has changed. I remember when I was at school, they taught us how to make our own website and now that's even changed these days so it's a bit harder to do that. I need to relearn pretty much probably… I'm looking to own my own cleaning business, just a little something to keep me going, you know, keep me busy and make a bit of money on the side and so obviously I'd like to make my own website and stuff like that for it… (Participant 12)

Women who might be considered as belonging to this category tend to either have a level of digital literacy that allows them to complete the basic functions of everyday life:

- but may lack the confidence to undertake more complex tasks.

- as well as a level of confidence that supports them to explore more complex tasks, which they may or may not succeed at.

In this category, women tend to have a medium level of skills, high relevance perception, high interest, and a variable level of confidence. In some cases, they may have had skills in the past, but understand that technology has moved on and they need to increase their skills. They have a deep enough understanding of the value of technology in their lives that they are interested in learning, however, they may or may not have the confidence needed to develop their capabilities further.

4.2.2.4 Category 4: High level of capability to use technology as part of living, learning and working

I wouldn't say that I was tech savvy. But not far from it... I'm pretty cluey on the computers, tablets and phones and that sort of thing. (Participant 10)

Women who might be considered to belong to this category tended to have a sound to high level of technology skill. They may not possess advanced skills, but they had the skills they needed to undertake everyday life functions and to operate in job contexts. Interestingly, when asked to describe themselves as a technology user, women in this category sometimes labelled themselves with words like 'hopeless' or 'beginner', while the stories they told about their technology experience clearly evidenced a higher level of skill than those labels imply. Women in this category also tended to have a high level of interest and relevance perception, and while they were at times self-effacing in the way they labelled themselves, their narratives evidenced a reasonable to high level of confidence.

4.2.3 Summary

Digital literacy is a complex phenomenon that is experienced differently by different people. This section has provided an overview of what constitutes digital literacy for this cohort, and the various ways that digital literacy manifested in the participant group. This discussion provides a foundation for the exploration of technology experiences and needs that follows.

4.3 Access to technology

In this section, we provide an overview of participants' access to devices and internet. We begin by discussing the importance of having immediate access to a mobile device on release, and move on to discuss the types of devices participants use and the types of internet connections they have access to.

4.3.1 Need for immediate access to a mobile device

The data suggests that access to technology is an immediate need for women on release from prison. This includes access to a mobile phone, as well as internet access (generally mobile access in the first instance). Immediate access to a mobile phone and mobile

internet facilitates re-integration into the community, socially and economically. On a social level, a mobile phone allows an ex-prisoner to re-connect with family and friends, using both traditional telephone functionality like phone calls and messaging, as well as social media. Economically, mobile phone access allows an ex-prisoner to:

- provide agencies they deal with a contact phone number
- re-establish self and identity by renewing drivers' licenses, getting a Medicare card, or sometimes obtaining other forms of identification
- establish whether bank and MyGov accounts are still active
- search for short and long term accommodation
- get access to transport, including Uber
- access online maps and directions
- find furniture using sites like Gumtree and eBay
- pay State Penalties Enforcement Registry (SPER) fines
- sign up for Newstart or parenting payments
- undertake online reporting
- engage in their children's education process.

Depending on the length of sentence, context of release, and whether they are being supported by a transition service, some women will have immediate access to a mobile phone. Participant 10, whose most recent incarceration was for a period of four months said: *Mum had [my mobile phone]. A friend picked me up from jail and she brought it up with her. I was straight onto it.* Others had basic phones provided and set up by Mara or Sisters Inside. Sometimes these phones were inadequate for the purposes for which participants needed them. For example, one participant recounted how pleased she was that Sisters Inside had set up Centrelink for her before release because *I've only just got a phone decent enough to be able to do that* (Participant 16).

4.3.2 Main devices

For participants in this study, the mobile phone (specifically, the smart phone) is their main device. In order of most used, based on mentions during the interviews, their devices used are:

1. Mobile phones
2. Laptop or desktop computer
3. Tablet
4. Smart TV or washing machine
5. None.

Where participants have access to a laptop or desktop computer, or a tablet, these devices tend to be owned by someone else in the family, including their children or a parent. Access to these devices therefore often needs to be negotiated with someone else.

Further, computers are seen by some participants as less convenient or accessible than mobile devices as they juggle the conflicting priorities of their lives.

Mobile devices are affordable, convenient, and tend to be owned by the ex-prisoner (although sometimes this phone is used by their children too). They have a sense of ownership over their phones, which are their primary means for connecting to the internet and undertaking the tasks of daily life that require access to the internet.

4.3.3 Type of internet access

Type of internet access varied across the cohort. Half of the participants in this study depend on mobile internet. Reasons for the reliance on mobile internet include:

1. Lack of a stable housing situation – participants who are share housing, staying with a parent, staying in a hostel, or moving around friends' houses need a consistent internet connection that is always accessible.
2. Lack of identification may impede them from obtaining a fixed internet connection.
3. Unaffordability of fixed internet connections.
4. Competition for resources (including sharing devices or internet quotas with family members) drives them to have their own independent access.

A number of these participants are very knowledgeable about mobile data plans and are conscious of how much data certain activities consume.

> *I recharge with $30 and you get 35GB for 28 days... And you get unlimited texts and calls. So, and then when I was watching Netflix, I watched two movies and an episode or something and it said, in my email, that I only have 4GB left. So, I didn't know whether that would be taken from Facebook time or whatever. So, I stopped watching movies so I could save it.* (Participant 3)

Seven participants have fixed internet connections at their home, in some cases NBN. Two participants did not access the internet either through mobile data or home internet. Neither of these participants use technology at all. In one case, the participant did not make it clear whether she reports in person at Centrelink or whether her partner does it for her (he undertakes a range of technology tasks on her behalf). In the other case, the participant reports in person.

4.4 Technology related needs and experiences

Women recently released from prison have a range of needs that can be met through access to and engagement with technology. In this section, we provide an overview of the needs that can be met by technology and the range of experiences participants have as they attempt to satisfy these needs. We begin with a discussion of the complex life circumstances of participants and their most pressing needs, which are generally not related to technology. Next, we provide an overview of the ways that women's technology

experiences are mediated by third parties. Then we provide a discussion of several key areas of technology experiences reported by participants, which provides insight into participants' technology related needs. This section concludes with a discussion of the barriers and enablers that impact on participants' technology experiences.

Experiences and needs are presented together in the following sections, as it is through the narratives about their technology experiences that participants' needs are revealed.

4.4.1 Re-establishing life in the community

Before we explore the specific technology-related needs and experiences that participants recounted in their interviews, we must begin by highlighting the most significant need that women must address on their release from prison: the need to re-establish themselves in the community. We have already highlighted that women have an immediate need for access to a mobile phone and mobile internet to allow them to complete specific tasks that help them to re-establish themselves. But re-establishing oneself is far more complex than getting access to a mobile phone and completing a series of tasks to arrange identification or organise a Centrelink payment.

For the participants in this study, re-integration is a complex experience with a high cognitive and affective load. For the participants in this study there was overwhelming consistency in revealing that, re-integration and re-establishing themselves incorporated:

- establishing routines and structures that would encourage them to avoid returning to past patterns of behaviour
- learning to manage mental health issues
- managing addiction
- re-connecting with children, including regaining custody
- meeting basic needs for food, shelter and clothing
- dealing with low self-esteem, poor self-image, and a sense of being a 'bad person'.

The cognitive and affective load that comes from dealing with their complex life circumstances prevents the women we interviewed from focusing on anything other than their most immediate and most critical needs in the period immediately after they are released from prison.

> *And she said, well, you're suspended. Your payments. So, I have an 8-year-old girl, no electricity. Just gotten out of jail, no payments and because of this technical glitch where I was meant to look for 20 jobs, I had no idea. I suffer from pretty bad depression and anxiety, so to go in there and look for 20 jobs on their computers, if you're not really savvy and if you're panicked…[this is difficult]* (Participant 4)

Many of the women we spoke to wanted to find work, but were unable to focus on job seeking because they were preoccupied with transitioning back to living outside of prison.

For one participant (Participant 3), who has been incarcerated multiple times over a significant proportion of her adult life, developing routines and habits, and making a concerted effort to follow a different path than she has after her earlier periods of incarceration, are important first steps towards staying out of prison, and things she feels she must pursue before finding work. Others needed time to manage mental health issues before they started looking for work: *I'm suffering mental health problems and need to get that dealt with first.* (Participant 4) Another participant said: *I need to work out my mental health before I go back to work otherwise I'll probably do something stupid like I did last time.* (Participant 16) This idea that finding work must come after meeting immediate needs was common for a number of participants. Additionally, a substantial proportion of participants felt they would be unable to work due to mental health issues or a disability. As a result, technology skills for job seeking – something our primary research question assumed was a necessity for women in the period just after they are released from prison – may in fact not be relevant to women in the immediate period post release – and may not be relevant to some women at all. Further, attempting to tackle job searches and applications using technology may be a significant stressor, particularly for those participants who have limited or no capability to use technology to live, learn and work. Put simply: once they have a mobile phone that provides them with internet access, technology is not a pressing concern for women who have been recently released from prison.

Nevertheless, technology can facilitate experiences and meet specific needs that occur through the process of reintegration. In the following sections, we highlight a range of needs and experiences related to technology that participants discussed in their interviews.

4.4.2 Mediation of technology experiences and access to technology

Participants' technology experiences are often mediated by a third party. Mediation may involve:

- Being influenced by a third party to not use technology or specific platforms
- Having a third party undertake some or all of their technology interactions
- Having a third party undertake set up of accounts or connections, which are then managed by the individual, often with ongoing assistance from a third party
- Having a third party provide support or instruction.

Mediation of technology experiences is typically undertaken by a partner, children and other family members, or professionals with whom the ex-prisoner has contact, such as transition service works and Centrelink staff.

Participants who are unwilling or unable to use digital technology tend to rely on their partners to undertake technology related tasks on their behalf, or to configure accounts, devices and connections for them. Three of the 20 participants had a high degree of mediation undertaken by their partners. For one participant, who does not own a mobile

phone or have any desire to engage with technology at all, her partner is critical to managing her personal affairs.

> *He's amazing. But he does all the technology side of things. Because he knows what he's doing, on his phone. But I don't…he just gets on his phone and he sort of shows me, and I'm like, look no matter how much you explain to me, I do not understand what you're doing. Just ask me a question and I'll answer it* (Participant 2).

Another participant reported that her partner set up her banking and Centrelink access for her, but that she is able to manage it on her own now that it is configured: *She set it all up. I've just picked a really easy PIN for everything…If I didn't have my partner, I think I would have just stressed out heaps and just not bothered* (Participant 7). Another element of mediation by partners relates to partners' influence on a woman's use of technology. When asked if she would like to use Facebook, another participant said that she would like to, but *My partner doesn't want me to* (Participant 8). Reliance on partners to complete functions of everyday life using technology, and the knowledge of and control over personal information that is facilitated by this, raises its own concerns about the vulnerability of women to partners.

Children and other family members also mediate in technology interactions and facilitate access to technology. Participants reported that:

- their children helped them search for rental accommodation
- children, friends and relatives helped with resumes and looking for work online
- friends helped them learn simple routines, as was the case for a participant who had suffered from a stroke and had short-term memory issues, and therefore struggled with tasks she did not complete often (Participant 15)
- access to devices was negotiated with family members. While most had their own mobile phones, they may also be used by their children, which limited their access. If they had a desktop or laptop computer, or a tablet, it was generally used by the children for their education, and therefore not available to them to use.

Children were the most frequently reported source of technology help. *[I]t's the kids who seem to know everything. I'll ask teenagers and they go "yeah, yeah you just do it this way. Look." Okay.* (Participant 19) This can be a positive experience. When speaking about getting help from her children, Participant 3 said:

> *I love it too, you know. Because they think I know everything and can do everything. And like sometimes I love it when they teach me something or they go, yes, mum you do it. I go no, no, you do it. I want to see you do it.*

Another way that family mediates technology experience is through competing for resources and access. This can be a source of significant tension. These tensions can sometimes be quite serious:

> *I got a computer for my birthday a couple of years ago and I used to have this program where you could watch DVDs on it. And that was all good and then I got a*

> *couple of movies up and you know, I went away, and my cousin sold it for drugs. So I just though, that's it. No more technology…If it's worth anything, they're going to get their hands on it. So I just decided, no, better off not having it.* (Participant 5)

In other instances, they are less serious, but still have an impact on participants' technology experiences:

- *He [my son] has to have a laptop. He takes it to school with him…I like using his laptop but it's his school's.*(Participant 6)
- *It's quite a battle at my house, because I've only got the one mobile, and my daughter she wants a phone. So it's a constant, come on, can I use the phone…* (Participant 4)
- Participating in social media with family members is an *avenue of communication…and to keep up to date with what the kids are doing or whatever.* (Participant 3)

In addition to assistance from partners and other family members, a significant proportion (30%) of the research participants reported relying on professionals to set up and manage their online interactions. Assistance provided by professionals included:

- Support from transition services such as Mara and Sisters Inside to provide mobile phones and set up Centrelink access and other apps.
- Assistance from Centrelink staff with online reporting to Centrelink. One participant said: *I've got to sign in on the Internet. So I go in once a fortnight to Centrelink and then a lady helps me get onto the thing and I press okay and then I get paid.* (Participant 5) Speaking of the way she engages with Centrelink, another participant said: *I do it all… I go in there. I don't use online for anything.* (Participant 8)
- Assistance with finding jobs to apply for: …*for me to be able to do my job things online, I go in there and I like write them down. I go in there and get them to help me put them on because even though they've showed me, I still do it at home and I can't do it…I'll do a couple by myself then a month later when I'm ready to do it again, it just looks, it's just like, woah. I don't even know how to start this again.* Participant 9
- Assistance with resumes and job applications when participants feel that they do not have the skills to work on this documents themselves. Participant 4 said: *I've actually asked my parole officer if she can help with resume writing.*
- Assistance with setting up apps and programmes including Centrelink help.

Reliance on third parties to mediate technology experiences correlates with low levels of digital literacy. Those with low digital literacy (including low skills, low confidence, low relevance perception, and low interest) tend to rely on third parties to undertake tasks *for* them, while those who have a higher level of digital literacy (medium to high skills, medium to high confidence, high relevance perception, high interest) tend to be more independent,

seeking help from third parties when needed. Across the cohort, more than a quarter of participants were heavily reliant on their partner or professionals to undertake digital tasks on their behalf or provide a very high level of support.

4.4.3 Key areas of technology experience

In this section, we provide an overview of the key areas of technology needs and experiences of participants.

4.4.3.1 Social connection

It is clear that women ex-prisoners have many of the same experiences and needs as the general population. Some of these needs may be greater as the women face social and economic isolation on release. Participants reported needing immediate access to mobile phones and internet to facilitate social connections. Mobile phones allow women to connect with family and friends through traditional phone functionality like phone calls and text messaging, as well as through social media.

A number of participants in this study reported using Facebook and Facebook Messenger to keep in touch with friends and family. When asked what was the first thing she did on being release from prison, one participant said: *I always like check your Facebook and that kind of thing, catch up with friends on Facebook. You don't normally have their numbers anymore…so that's how you track people down.* (Participant 14) For many of the participants in this study, Facebook is an important communication channel that helps them to maintain family connections – for example, it allows them *to keep up-to-date with what the kids are doing or whatever* (Participant 3). Engaging with others via Facebook can also have a positive impact on an individual's mental health: *I go on [Facebook]. I just try and grab the positive stuff. I like to save positive memes and put it up.* (Participant 6) This participant described her practice of collecting and sharing memes as 'looking after herself', as well as providing some positivity for others she is connected with.

In addition to facilitating connection, Facebook has other functions. It is an important repository for personal memories and acts as a mechanism for keeping photos and records, and being reminded of events and milestones that occurred in the past:

> *[T]he only main reason why I wanted my old [Facebook] profile is for all the photos and for everything that's on there. Because if you're looking at my things, you can't see any of my stuff because it's privatised. And that's what I hated because I wanted the photos. I wanted to save everything off there.* (Participant 3)

Other participants use social media to pursue interests in a social context:

> *I do social media. I do – I like photography so I like photos of the kids, I like to use the apps to make them better and stuff…* (Participant 20)

Facebook can also be a space where job opportunities are found. Many small and local businesses use Facebook instead of corporate websites, and informal work arrangements like labour hire may also focus on recruitment through social media.

Some of the participants who use Facebook highlighted that Facebook could have a negative impact on them by reconnecting them with old friendship groups who may impact adversely on behaviour changes they are trying to make. *It's a good thing and a bad thing, it depends if you're trying to change your life or not. You know, disassociate yourself from people…turn your life around…that makes it a bit difficult.* (Participant 14) Additionally, a number of participants reported that their probation and parole officers strongly urge that they not participate in social media in order to build new social networks away from previous 'bad influences'. Some participants had made a conscious decision not to use Facebook, sometimes informed by the perspective of their probation and parole officers, and sometimes through reflecting on their own experience over time:

> *In the past it's been nothing but trouble…It took me three months before I even went on Facebook this time until I felt I was comfortable to just get rid of all that bad influence on there.* (Participant 7)

> *[Prison] definitely made me sit back and reflect on what I had done and the choices I'd made in life and you know, technology was a big part of it. The Messenger and all that. I'm not on Facebook any more, I've completely disowned that…You can't but help have people contacting you through technology when you're on Messenger because they want to buy drugs or whatever it may be, it's just how it is.* (Participant 12)

In some ways, avoiding social media, though beneficial in breaking old patterns of behaviour, becomes a double penalty: first the time in prison without access to technology; and then being asked to further avoid it on release.

Social media is not universally beneficial, and there are certainly risks related to associating with previous contacts. It is, however, one tool that can assist with managing isolation and pursuing positive interests.

4.4.3.2 Managing finances

Getting finances in order is an immediate need on release from prison, and one that is often met through technology. A majority of participants reported a need to access mobile phone apps, messaging and Centrelink or MyGov apps to manage finances and related online identities. Additionally, participants use banking apps to manage personal finances. Those without access or without a level of digital literacy to manage this themselves depend on friends and professional support to navigate the online systems for them, which has potential for misuse and puts these participants at risk.

Almost every participant reported issues with accessing Centrelink, Medicare and NDIS. These issues specifically relate to the technology, in addition to common interaction issues. Technology issues are sometimes compounded by a lack of clarity from Centrelink staff on how to access services, requiring women to do their own research or rely on others in their family to find their way: *I got my daughter to help. So that lady at Centrelink didn't know what she was on about. You've really got to do your own research even though it might take a while.* (Participant 6)

Several participants reported that they cannot manage online reporting, that their partners, children, case workers or support agencies help them to establish online identities and accounts, and in some cases, routinely enter reporting data for them.

4.4.3.3 Accessing entertainment

When life circumstances are unstable, including uncertain and unstable housing situations, navigating parenting issues and custody, and dealing broken relationships, access to entertainment is important. Entertainment provides a means to occupy time, a distraction from what can be a very difficult reality, and a way to relax. Participants spoke frequently about streaming television and movies, gaming, and listening to music as forms of entertainment. In some ways, the pursuit of entertainment has been a driver for digital literacy development. For example, one participant spoke about learning to set up a Chromecast because she had sore eyes from looking at content on her mobile device (Participant 3). In another example, streaming content has led to participants learning to manage mobile data use:

> *I picked data and that is really good with Optus…and you get unlimited texts and calls…when I was watching Netflix, I watched two movies and an episode or something and it said, in my email, that I only have 4GB left. So I didn't know whether that would be taken from Facebook time or whatever. So I stopped watching movies so I could save it.* (Participant 3)

> *I've got like 15GB of data…yeah I'm sweet…Depending on – if I stream movies and stuff like that, normally I do that and I go over my data but other than that, no, not for social networks and stuff.* (Participant 16)

Sourcing content via multiples apps and streaming services also provides learning opportunities, as participants work out where to find the content they want, how to get it onto their mobile device, and how to access it in the future (Participant 3).

It should be noted that not all participants use technology for entertainment. Some participants do not understand or are confused by concepts like streaming. *They download movies and stream all that stuff. I don't understand all that. I just want to watch a movie, I put the TV on.* (Participant 15)

4.4.3.4 Using technology at work

Participants in this study were not using technology at work. None of the participants were working at the time of their interviews. Further, a number of participants highlighted that once they were able to work, they were unlikely to be employed in roles that required them to engage with technology at work. Where they have criminal convictions related to theft, burglary or fraud, participants are unlikely to have access to either money or items of value (such as technology) in their jobs:

> *Because I have property offences, and burglaries and that, and fraud. I probably won't be one in a million for a job at where a cash register is, accessible or something like that. You know, so I'll take what I can. Even if I've got to woodwork or factory work or something like that. Away from money or things that can be stolen, just to build and focus on that. Like warehouse or something. You know, a job is a job to me.* (Participant 4)

Most participants who spoke about the type of work they would be seeking listed jobs that would require them to have minimal, if any, engagement with technology: landscaping, construction, factory work, meat works, and cleaning. Across the cohort, there is limited or no need for participants to focus on acquiring technology skills for use at work.

4.4.3.5 Seeking employment

While they may not need technology skills for work, participants in this study reported a need for technology skills to support them in finding and applying for employment. A number of participants were seeking employment or were working towards seeking employment once they had settled back into life outside of prison. While job seeking may not be an activity they are currently engaged in, participants spoke about their future needs and past experience with job seeking.

Participants reported a need for a range of job search skills. These include knowing how and where to look for work online and basic technology skills to support them in looking for work using a mobile device or a computer. Some participants reported using websites like Seek to find jobs: *Well, I go onto Seek.com or something. That's how I've always sourced jobs before.* (Participant 4) Some participants who had looked for work online express some confusion with the process: *You've got to fill out these things and I put in 'cleaner' and the area and then I think it's going to take me into a job to read about it but it doesn't. Then every day now, I'm getting thirty emails…* (Participant 9) The following quote from the same participant highlights some of the difficulties with online job searching for people with low technology skills and confidence: *for me to be able to do my job things online, I go into [the job network provider] and I like write them down. I go in there and get them to help me put them on because even though they've showed me, I still do it at home and I can't do it… They try and show me and then I'll do a couple by myself but then a month later when I'm ready to do it again, it just looks, it's just like woah. I don't even know how to start this again.* (Participant 9)

Another key job search skill that is not specifically technology related, but that is fundamental to finding appropriate work, is an understanding of the types of roles they may or may not be able to apply for given their criminal record. Some participants were cognisant of these limitations, particularly those who had been incarcerated before, while others were less clear on what jobs they were likely to be able to secure. One participant recently released from her first period of incarceration offered a unique dual perspective on job seeking with a criminal record: prior to being incarcerated, she worked for a job search agency.

> *When I worked for six years doing it, people sat in front of me. If they had a police record, it didn't faze me. There would just be certain jobs that you wouldn't put them forward for, but I'm finding now that it's me, it's harder. I'm finding it's not as easy. I never found it an issue. I still found people jobs who had a criminal history but now it's me, it's different.* (Participant 10)

Despite having experience working with a job search agency, this participant described a difficult encounter she had in a job interview the day before we spoke to her. She had been asked if there would be any problems with her police check. Embarrassed and caught off guard, she said no, but later felt compelled to email the agency to let them know she did indeed have a record. Despite having 10 years of administrative experience, this particular participant was now considering jobs in a meat works but felt that she would look overqualified 'on paper'. Navigating the complex terrain of the job market is difficult at the best of times, however, it is even more complex for women who have recently been incarcerated because their options are limited, and they may not be aware of those limitations, or of what opportunities are available to them.

In addition to skills related to finding job opportunities, the women we interviewed highlighted the need to know how to create a resume, how to print copies of it, and how to email it. Participant 9 has completed some certificate courses since being released from prison. She spoke about being taught to create a resume. Her description of the process of learning provides insight into how difficult it is for someone with low technology skills to undertake this kind of activity:

> *[W]e needed to use [computers] to do our resumes but we could get one on one support. There was a level of us who didn't know how to do it or use it, make the space right and all that stuff… We already had the layout of one that was there in front of us but [we needed] to erase some of it and write our own stuff. You know how you have to get it all to line up and then, they showed us all on the board because, with the projector, of how to do it but no, it just went in circles in my head.* (Participant 9)

Some people may need more hands-on, structured assistance to develop the technology skills they need to create a resume. Others seem more able to adapt: *If I'm showed or taught then I'll get it but I find technology is more easier than it used to be…My cousin showed me how*

to work [Microsoft Word] on the tablet and it's pretty easy, straightforward… (Participant 11) Of course, in addition to technology skills, resume writing is itself a particular type of writing that job seekers need to learn. To overcome barriers related to technology skills and resume writing skills, some participants asked their job network provider or parole officer for assistance with creating a resume. When asked if she felt she could create a resume, one participant said:

> *I don't know how to do it. I know how to get on the computer, do a few things but that's a good one. I should learn to do it. I always get my daughter to do it… They were brought up with it. That's like second knowledge to them. It's amazing. I'll go on there and she'll come out and say "Oh my God. You haven't even done this yet" because I don't know which button to press.* (Participant 6)

Once they have a resume, job seekers must also have the capability to distribute it. Not all participants use email and others have only recently learned how. Further, instructions for submitting applications electronically, either via email or through an online system, can be confusing: *then you click on [the link in a job search email alert] and it's saying, I don't know, you can apply for jobs but you have to send your resume. I'm thinking 'how do I send my resume when I'm on this page?'* (Participant 9)

4.4.3.6 Parenting

A significant portion of participants with children noted that they need to use technology to engage with the school, including reading emails from teachers or principals, accessing a parent portal online, making online payments, and ordering tuckshop. One participant indicated that the only time she uses email is when she's in contact with the school, and that can be quite frequent: *the boys go to a private school so there is a lot of pressure there. You have to keep updated with so much, every little detail.* (Participant 6) This participant described the complexity of her life, parenting seven children of her own (including a newborn, two teenagers and four young adults) and also caring for her grandchild frequently, and felt she was rarely able to sit down at the computer other than to engage with the school when needed.

Participants also reported a need to support their children in doing their homework. In a few cases, this might involve helping them with technology. In other cases, participants reported using Google to help them understand what their child was learning about: *I know that if my daughter, she's only in I think grade four, she'll bring some things home and I don't even understand what her homework means. I would quickly Google it, you know what I mean.* (Participant 9) 'Googling' is also a strategy that participants use to answer other questions related to parenting: *I also use to look up stuff regarding [my daughter], you know, like if she's got a rash or, you know like, what to do here or what to do there.* (Interview 14)

Children mediate access to technology for a number of the participants. This might involve children completing tasks on their behalf, children setting up accounts or apps for the

parent to use, or the child teaching the parent how to do something. Many participants describe their children as being significantly more 'tech savvy' than they are.

4.4.3.7 Summary: technology needs

Women who are recently released from prison have specific needs that can be met – at least in part – by access to, and ability to use, technology, as evidenced by discussion in the previous sections. However, for women who have low levels of skill, low confidence, a limited understanding of the relevance of technology, and little interest in engaging with it, dealing with technology at all in the period after their release from prison can be stressful. Many of the needs and experiences recounted in the previous sections were part of stories the women told us about the difficulties they have with using technology. Issues with managing low levels of skill and confidence are compounded by the pressing concerns women have related to finding accommodation, regaining custody of their children, and feeding their families. This does not mean that digital literacy is not important for this cohort. Rather, the opposite is true. If women had a higher level of skill, confidence, and perception of relevance of technology, the cognitive and affective load of using it in a time where they are already under significant stress would be reduced.

To be able to self-sufficiently manage technology related to social connection, accessing entertainment, managing finances, seeking work, parenting, and other matters, women need access to technology, skills to use it, mindsets to support learning, and support to develop capability and troubleshoot. Table 2 provides a summary of access, knowledge and skills that are needed to promote self-sufficiency in these areas. It is based on the information provided by participants about their needs and experiences in the interviews.

In addition to the specific skills and knowledge listed in Table 2, women need basic skills to operate their main device and the capability to manage operating systems and apps, including software updates. Mindsets are also important, with resilience and confidence being particularly critical when dealing with unfamiliar technology.

	Social connection	Accessing entertainment	Managing finances	Seeking work	Parenting
Minimum device requirements	Smart phone	• Smart phone • Tablet, computer or streaming device if a larger screen is needed	Smart phone	Tablet or computer	Smart phone
Minimum requirements for internet connection	Mobile internet with sufficient data to download and use apps	Mobile internet with a large data plan and/or a fixed internet connection	Mobile internet with sufficient data to download and use apps	Mobile internet with sufficient data to download and use apps, download job descriptions, upload resumes and applications	Mobile internet with a large data plan to support use by multiple parties and/or a fixed internet connection
Knowledge requirements	• Understanding of privacy and security concerns related to online presences (that is, how to keep themselves safe online) • Understanding of how to extricate themselves from existing friendship groups where necessary	• Understanding of data consumption for different types of media and the ability to make judgements about what to use data for • Understanding of copyright restrictions	• Understanding of privacy and security concerns related to online presences (that is, how to keep themselves safe online), including an understanding of the risks of giving other people access to their accounts	• Understanding of where and how to look for job opportunities • Understanding of the types of jobs they may or may not be eligible for • Understanding of how to write a resume	• Understanding of how to search for information to find answers to questions • Basic understanding of how to use a computer (to support children who require a computer for their education)
Skills	• Ability to use a variety of communication apps, or ability to apply basic skills to new and unfamiliar apps • Social skills to avoid or manage difficult interactions	• Ability to use apps to access music, television, movies and books, or ability to apply basic skills to new and unfamiliar apps • Ability to search for and find content • Ability to manage content through a variety of apps	• Ability to use a variety of banking and government apps, or ability to apply basic skills to new and unfamiliar apps	• Ability to use a word processing application and template to create a resume • Ability to search for job opportunities • Ability to navigate employment websites • Ability to submit online job applications • Ability to send and receive emails, including with attachments	• Ability to use school apps, or ability to apply basic skills to new and unfamiliar apps • Ability to send and receive emails

Table 2: Summary of access, knowledge and skills that needed to promote self-sufficiency

4.4.4 Barriers and enablers

A range of barriers and enablers impact on participants' technology experiences and their capacity to meet their own needs with regard to technology.

4.4.4.1 Barriers

In the interviews, we asked participants about the barriers they experienced related to technology use. We also identified a range of barriers as part of the analysis process. The most common barriers are outlined in Table 3.

Barrier	Cause
Preoccupation with other pressing concerns	Participants are managing complex life circumstances that involve a significant cognitive and affective load. Many are also managing mental health concerns, including anxiety. The early period of re-integration can be significantly stressful, and managing this stress and complexity can make it difficult for participants to deal with unfamiliar, challenging technology related tasks.
Low level of technology skills and knowledge	Many participants have had limited exposure to technology, for a variety of reasons: • It was not taught as part of their formal schooling. • They have been incarcerated for a significant portion of their life, with no or limited access to technology. • They have not worked in jobs that required them to use technology.
No or limited understanding of the relevance of technology in their lives	Many participants have had limited exposure to technology and consequently have not had the opportunity to see how it might benefit them.
Inability to keep up with the pace of change	For participants who have been incarcerated for longer periods of time, or frequently incarcerated for shorter periods, maintaining skills and knowledge in a rapidly changing technology landscape is challenging and overwhelming.
Lack of access to suitable devices	• The cost of acquiring devices such as smart phones can be prohibitive. • Devices supplied by transition services are often less expensive devices that may not be able to run the apps needed to manage personal affairs. • Participants may only be able to acquire prepaid phones due to lack of identification or a fixed address

	• Participants who leave prison after a longer period of incarceration and begin using their old devices may find these are not able to run the apps required. • Sharing devices with family members (particularly children) can make it difficult to get access when needed.
Lack of access to a reliable internet connection with sufficient data	• Cost of mobile data can be prohibitive and data can be consumed quickly if not actively managed. • Participants did not always have fixed addresses at which to arrange a fixed internet connection. • Some participants had difficulty arranging a fixed internet connection due to lack of identification. • Sharing internet connections with others in the family can result in data being consumed quickly.
Difficulty learning from others / inability to access others to learn from	• People who assist participants with access to technology are often task-focused rather than teaching-focused or enabling-focused. Rather than providing instructions, they complete tasks for the person needing assistance. • Explanations provided by third parties are often focused on where to click on specific websites, rather than focused on explaining concepts that are transferable to other contexts. • Some people may not have anyone they can ask for assistance.

Table 3: Barriers to technology use

These barriers are often experienced in combination, creating conditions where it is very difficult for women to have positive technology experiences.

4.4.4.2 Enablers

We also asked participants what enabled them to have positive technology experiences, and looked for enablers in our analysis of the data more generally. The most common enablers are outlined in Table 4 (next page).

Enabler	Impact
Money	Money was explicitly noted by a number of participants as the primary enabler for their technology use. Money allows them to procure a suitable device and maintain an internet connection with sufficient data to fulfil their needs.
Stable housing	Stable housing has two main impacts on technology experience: 1. The resulting general reduction of stress as a result of having stable housing frees up time and mental energy that can be invested in other areas, including technology use. 2. Having a fixed address allows participants who have appropriate identification and sufficient funds to arrange a fixed broadband internet connection.
Confidence	Confidence in their ability to use devices and to learn new things results in a willingness to experiment and learn through trial and error. Those participants who had more confidence with technology were less stressed about using it.
A trusted partner	For women with a low level of technology skill, having a trusted partner who can set up apps, accounts and connectivity enables them to manage their personal affairs with technology. It should be noted, however, that this practice carries with it risks related to potential misuse and power imbalances within the relationship.
Capacity to make social connections	Being able to make social connections, whether in person or via social media, has two main impacts on women's technology experiences: 1. It allows them to form support networks that can assist them with technology use. 2. Having a sense of belonging can boost confidence, and general improvement in confidence can have an impact on confidence with technology.
Good or well-managed mental health	When participants are not dealing with serious mental health concerns, they tend to have greater confidence and resilience in dealing with technology.
People willing to spend time with the person to teach them	When participants are able to engage with people who are willing to spend time to teach them how to use technology, their skills, knowledge and confidence improve. When that person is a child, the experience can have added affective benefits and provide an opportunity for the participant to connect with their child.

Table 4: Enablers of technology use

4.5 Archetypes of women ex-prisoners as technology users

In addition to the narrative findings presented in previous sections, we have developed a series of four archetypes of women ex-prisoners as technology users. These archetypes are loosely based on behavioural archetypes that are typically used in user experience work (Smashing Ideas, 2017). We opted to develop archetypes as a way to provide a concise but reasonably complete overview of the digital literacy, technology needs, and technology experiences of the cohort. The archetypes are grounded in the interview data. The archetypes begin on the next page.

Archetype 1

Active Avoider

Quotes

"I'm quite happy being oblivious."

"I'm like, 'look, no matter how much you explain to me, I do not understand what you're doing."

"It's just… I don't really understand it… [O]bviously because I've been in jail my whole life really. It's just something that I don't, it doesn't function in my head."

Narrative

This person has recently been released from prison following a period of incarceration of over a year, however, she has been incarcerated on multiple occasions throughout her life. This might include being in juvenile detention from her early teens. She describes herself as 'institutionalised'.

She has no more than a grade eight education and her schooling may have been completed in juvenile detention, where she had no access to technology.

Having been incarcerated for all or most of the last decade or more, with only short periods of being in the community, she has had very minimal access to technology. Consequently, she does not see how technology could be relevant to her. She sees no benefit to it and has no interest in learning to use any technology.

She does not use any technology at all, and all of her technology needs (for example, interaction with Centrelink) are managed by her partner or another third party.

Demographics

Education
Completed one or two years of high school.

Employment Status
Not working or looking for work.

Incarceration History
Long term incarcerated with multiple incarceration periods over a decade. She has been incarcerated for most / all of her adult life.

Technology Usage

Devices Used
Unlikely to have a smart phone, but if she does, she does not know how to use it other than to make calls and send and receive text messages.

Does not have access to or know how to use a computer.

Struggles to use smart technology around the home (e.g. washing machine).

Access to the Internet
Does not have access to, or any desire to access, the internet.

Mediation of Technology Use/Access
All technology interactions necessary to manage her personal affairs are managed by her partner or another third party, such as someone at Centrelink, and she is comfortable with this arrangement.

Does not want independent access to technology.

Technology Usage
Does not use any technology at all.

Social Media Use
Does not use social media.

Unwilling to put her personal information on a public platform, which she perceives as something that happens on social media.

Cognitive and Affective Dimensions

Perceptions of Technology

Sees technology as 'ridiculous': it is superfluous in her life, confusing, and mysterious.

Perceives certain types of technology (e.g. smart home technology) to be the height of laziness.

May see the monetary value of technology as dangerous, as it may be stolen from her.

Her complete avoidance of technology and the language she uses to talk about it suggests she is fearful of it.

Motivation to Engage with Technology

Not motivated to use technology. In fact, she is strongly motivated to avoid use of technology – for example, she would rather wash clothes by hand than use the smart washing machine.

It is unlikely that she could be motivated by any extrinsic factors to begin using technology, as she does not see personal relevance in her life.

Expectations of Technology

Expects to be confused and unable to use technology.

Expects to be unable to apply instructions she has received in the past to completing tasks using smart technology (for example, unable to replicate the steps to use the smart washing machine after being shown how to use it).

Expects to be able to avoid technology use by having her partner or another third party undertake all technology-related functions including managing Centrelink interactions.

Feelings About Technology

Feels frustrated and overwhelmed with technology.

Fearful about impacts of using social media.

Has a generalised fear of technology.

Impact of Incarceration on Technology Skills, Knowledge and Mindsets

Long term incarceration has meant this person has not had access to technology or any instruction on how to use it for a significant portion of her adult life. Lack of access to technology means she does not have an understanding of how it might be useful to her. She does not feel she needs access to, or knowledge of, how to use technology.

Archetype 2

Reluctant User

Quotes

"I don't even try and do things on the computer. If I need to go my job agency thing, I'll go into the thing and get them to help me on their computers."

"[My partner] set it all up… If I didn't have my partner, I think I would have just stressed out heaps and just not bothered."

"There's nothing I really want to learn about. I think the less I know about it the better."

"I don't know what there is on there to learn, really."

Narrative

This person was recently released from prison after a period of incarceration of a number of years, or she may have had several periods of incarceration with limited time out of prison between each period.

She uses technology, but only reluctantly. Her partner or another third party has set up all of her access to services like MyGov and banking and shown her how to use them. She just needs to remember her pin numbers and passwords to get access.

She has made a conscious decision to limit her use of technology because she perceives that it has gotten her into trouble in the past. She used to spend 'too long' on Facebook, which she used a lot, 'mainly to get into trouble'.

She is currently not looking for work due to health concerns and having a focus on staying clean, but would like to work in the future. She is unsure about how to go about finding work because she has never worked before. She is aware that her criminal record will impact on the types of jobs that she can access.

Demographics

Education
Completed primary school.

Employment Status
Not employed or currently looking for employment, but aims to begin job seeking in the future, once health concerns are managed.

Incarceration History
Long term incarcerated with multiple incarceration periods over a decade. Her most recent incarceration was for multiple years, or she has had very little time out of prison between periods of incarceration.

Technology Usage

Devices Used
Smart phone.

Access to the Internet
Primarily uses home wireless internet, which was set up by her partner or another third party, but also has access to mobile data.

Mediation of Technology Use/Access
Partner or another third party set up all of her accounts and apps.

Partner or another third party set up their home internet connection and got her connected to wireless internet.

Technology Usage
Uses her smart phone to make calls, access Facebook, manage online banking, and look for information using Google.

Accesses streaming services her partner or other third party set up.

Avoids games due to previous addiction.

Social Media

Uses Facebook but may not have re-engaged immediately on release due to issues with past use of Facebook.

Feels Facebook helped her to get into trouble in the past.

Feels she spent too much time on Facebook in the past and has significantly cut back on her usage.

Cognitive and Affective Dimensions

Perceptions of Technology

Perceives technology as troublesome in all sense of the word: it causes her frustration and has contributed to her getting into trouble in the past.

Understands that some engagement with technology is probably essential, but does not enjoy it or have any desire to learn about it.

What Motivates Her to Engage with Technology

Reluctant user who tends to engage with technology primarily when it is essential, although she does use Facebook to keep in touch with people, and streams content for entertainment.

Expectations of Technology

Expects that technology may cause her trouble.

Expects to have difficulty in using technology.

Expects her partner or another third party will be able to help her get set up to use technology.

Impact of Incarceration on Technology Skills, Knowledge and Mindsets

Extended periods of incarceration meant limited exposure to technology, which results in her having a limited understanding of its relevance in her life.

She perceives that technology contributed to her getting into trouble and by extension, may have been partially responsible for her incarceration. This has given her a negative perspective of technology.

Archetype 3

Adaptive Learner

Quotes

"Coming out of prison is like going from the Flintstones to the Jetsons."

"I've always had an adaptive behaviour because I've had to adapt to all types of environments."

"[I've] just pretty much taught myself, yes. [I] got really interested in it and started teaching myself."

Narrative

This person has recently been released from incarceration, having been incarcerated multiple times throughout her adult life, never staying out of prison for more than a few months at a time. She feels this time, things will be different. She is highly motivated to stay out of prison and has more hope than she has had in the past.

She is currently working on re-establishing herself: getting phone and internet connections in place and re-connecting with her children. She is focusing on herself and working on building positive routines and structure to support reintegration. She is looking forward to finding work in the future, but job seeking is not an immediate focus as she is focusing first on establishing herself. This time around, she is trying to make small changes and improvements in her life, rather than rushing to get everything in order at once.

When she does begin looking for work, she will try to do so independently and will ask for support with things like creating a resume when she needs it. She has older children who provide her assistance with technology, and she is working with a transition service who she can also go to for support.

She describes herself as an adaptable technology user. Adaptability more generally is a personality trait she prides herself on, and one that she says she has developed as a coping mechanism. Her technology skills are self-taught and she has the ability to independently work through challenges to arrive at solutions.

She currently uses technology primarily for entertainment and to connect with others. She finds and listens to music, streams television shows and movies, and uses Facebook as a personal archive and communication tool.

Demographics

Education
Completed one or two years of high school.

Employment Status
Not employed or currently looking for employment, but aims to begin job seeking soon.

Incarceration
Multiple periods of incarceration over a number of years.

Technology Usage

Devices Used

Smart phone, provided to her by her transition service provider.

Laptop – an old one her parents gave her.

Access to the Internet

Either has broadband internet at home or will do in the near future.

Uses mobile data to access the internet, download and stream content, and access Facebook.

She is knowledgeable about mobile data and through trial and error, has learned to manage her data usage for different types of content.

Mediation of Technology Use/Access

She is generally an independent user of technology.

When she requires assistance, she asks her children for help.

Her mobile phone connection was arranged by her transition service provider, which she found very helpful.

Technology Usage

Uses her smart phone to manage her personal affairs, and to find and listen to music.

Uses a laptop to watch streaming content.

Social Media

Uses Facebook.

Still connected to people she was connected to before prison; acknowledges that this is at times problematic.

Uses Facebook as a storage platform for photographs and enjoys having things pop up in Facebook's memories functionality.

May not find Facebook to be a positive space at times but looks for the positive and focuses on avoiding negative interactions.

Sees Facebook as a useful communication channel, which encourages her to keep using it.

May have accounts on other platforms (for example, Twitter), but does not know how to use them, or have any interest in learning.

Cognitive and Affective Dimensions

Perceptions of Technology

Generally has a positive perception of technology and its role in her life.

Does not perceive technology to be relevant to her in terms of future employment, as she is unlikely to be given a job that requires her to interact with technology due to the nature of her criminal convictions.

Motivation to Engage with Technology

Technology provides an opportunity for her to connect with her children. She enjoys having them teach her things and likes to watch them do the things she asks for help with.

Music is very important to her, and she is motivated to learn how to access the music she wants to listen to.

Technology provides her with entertainment and opportunities for relaxation.

She is a self-motivated learner who looks for solutions to her own technology problems but is unafraid to ask for assistance.

Expectations of Technology

Expects to be able to adapt to use the technology she needs to use.

Expects to be able to acquire skills as she needs them, including by asking her children for help.

Feelings About Technology

Sometimes frustrated by technology challenges experienced (for example, finding and downloading music), but is generally able to work out solutions.

She is proud of her capacity to adapt to different ways of using technology.

Generally feels positively about technology.

Impact of Incarceration on Technology Skills, Knowledge and Mindsets

Her life circumstances – including frequent periods of incarceration – has led her to be adaptable to different contexts. This adaptability has had a positive impact on her use of technology.

Changes in technology during her periods of incarceration may cause her frustration, but she is generally able to problem solve and adapt to the change.

Archetype 4

Confident User

Quotes

"There's nothing I can't do on technology… I'm pretty savvy yeah."

"I love technology. I have worked in an office for over ten years on computers. My phone is attached to my hand all the time."

Narrative

This person is recently released from her first incarceration, which was a reasonably short period of a few months. Prior to being incarcerated, she had a job in which she may have used technology with some regularity (e.g. she may have worked in administration).

Since leaving prison, she has been preoccupied with the challenges related to trying to establish herself again. She has navigated difficulties with custody, housing (potentially including loss of the house she has been paying a mortgage on for many years), obtaining Centrelink payments, and the cost of essentials like food. Caring for young children occupies her time and leaves her limited time to engage with technology.

Once she is re-established (and perhaps when her younger children start school), she hopes to find work. She is open to what this work might be, recognising she may not have the same opportunities that she had prior to incarceration now that she has a criminal record.

She is an adaptable technology user who feels that she can develop skills when needed and is confident in her ability to use technology to support her in seeking work.

Demographics

Education

She has a higher level of education, having completed grade 10 or 12, and in some cases, may have a diploma or certificate obtained prior to incarceration. May be investigating options for further study.

Employment Status

Looking for work or hoping to look for work in the future.

Incarceration History

First time incarceration.

Incarcerated for six months or less.

Technology Usage

Devices Used

Smart phone.

Computer.

Tablet.

Internet Access

Fixed home broadband connection with wireless internet connection

Mobile data using smart phone and/or as a hotspot.

Mediation of Technology Use/Access

Her use of technology is generally not mediated by any third party, however, she may sometimes ask her children for assistance with new tasks, or tasks that are taking too long / becoming frustrating.

Technology Usage

Uses her smart phone to access Facebook and manage her personal affairs.

Uses a computer to receive and send emails, primarily related to her children's schooling.

Social Media Use

She uses Facebook, however, her ability to engage may be impeded by the demands of managing her life.

Tries to engage positively, looking for opportunities to bolster self and others.

Cognisant of the impact of being accessible to contacts who may be part of her old lifestyle, which she now wants to move on from.

Cognitive and Affective Dimensions

Perceptions of Technology

Technology is a tool that can support her in seeking work, help her find answers to questions, and allow her to manage her personal affairs.

Perceives technology access to be important for her children.

Although she is quite a confident technology user, she perceives that her children are more skilled as a result of their immersion in technology. She asks for help from her children when needed.

Motivation to Engage with Technology

Motivated by an understanding of the role and impact of technology in her life; she appreciates the conveniences that technology offers. She also likes to engage in technology to assist her childrens' learning.

Expectations of Technology

Expects to be able to adapt to new and different technologies.

Expects to be able to access key services via her phone, which is a more accessible device than a computer, which she may not have time to use.

Feelings About Technology

Confident in her own capacity to use technology and acquire skills in the future.

Feels frustrated by having a lack of time to engage with technology.

Impact of Incarceration on Technology Skills, Knowledge and Mindsets

Incarceration may have shifted her feelings about technology, offering her a new perspective after an enforced break. This may result in intentional changes in her behaviour (for example, she might disconnect from friendship groups on social media).

5 Discussion

In this section, we draw out and highlight to key areas of findings from the study.

5.1 Challenging the implicit assumptions in our primary research question

The primary research question driving this project was: To what extent do post-release women ex-prisoners have the digital literacies they need to find employment and reintegrate into society? This question makes three assumptions:

4. That women ex-prisoners are looking for work in the period immediately after their release
5. That women ex-prisoners may be seeking work that requires them to use technology
6. That digital literacy is or should be a priority development area for this cohort.

In reality, none of the participants in our study were employed at the time of their interview and very few were looking for work. They were preoccupied with reintegration, juggling their complex life circumstances, and managing mental and physical health concerns, which in many cases means they were not in a position to be seeking employment. Further, those participants who were looking for work or wanted to look for work in the future are limited in terms of the job opportunities available to them because of their criminal record. It is unlikely that many of them will seek work that requires technology skills. Once their immediate need for access to a mobile phone is met, technology is not a pressing concern for women who have recently been released from prison.

Digital literacy, however, has a broad impact on women's experience of reintegration. As evidenced in the findings from this project, women ex-prisoners have a range of needs that can be met – in full or part – through engagement with technology. These include a need to: connect socially; manage personal finances; access entertainment; and engage in parenting-related activities.

The answer to our primary research question, then, is that women ex-prisoners may not need digital literacies to find employment, because they may not be looking for work. However, digital literacy can support them in reintegration more generally because it can facilitate improved technology experiences in other areas of their lives.

5.2 Identifying areas of focus to support improved digital literacy

This research evidences a need for a focus on development of digital literacy for women in prison and in the period immediately following their release. The focus for this particular cohort needs to be on what Adams Becker, Pasquini and Ventner (2017) refer to as 'universal literacy'. 'Universal literacy' relates to the capability to use basic digital tools. The Australian Information Industry Association (AIIA) (2017) suggested that to survive in a modern world, people should be able to (in summary):

1. Use a search engine to find information.
2. Store data for later retrieval (on a device or in the cloud).
3. Use email, messaging, social media and video calling to communicate with family and friends.
4. Comment on online forums and connect with online communities.
5. Manage online transactions such as bank accounts, using digital government services, booking events and travel.
6. Understand how to buy and sell online safely.
7. Problem solve using videos or feedback from other users or live chat.
8. Create basic content e.g. a document, photo album, making a social media post.
9. Share content safely online (p.31).

Our research reinforces the need for women ex-prisoners to develop these skills. While they may not seek employment in roles that need these particular skill sets, they are nonetheless relevant to life-wide use of technology. Based on our analysis of the interview data, it is fair to say that a majority of participants in the study are not able to do some or all of these tasks, evidencing a need for skill development in many of these areas.

Drawing on participants' recounted experiences with technology, we have identified a number of specific areas for digital literacy development for this cohort. These are explored in the following sections.

5.2.1 Understanding of the relevance of technology in their lives

A significant barrier to technology use for this cohort is a lack of understanding of the relevance of technology in their everyday lives. To improve this understanding, women need consistent exposure to contemporary technology and to have the relevance to their lives clearly demonstrated by someone who is relatable.

5.2.2 Basic device usage

Many participants did not have a solid understanding of how to use their primary device, which in almost all cases was a smart phone. They may have the capability to complete specific tasks, but may lack more general knowledge, like how to copy and paste text, how to save a file, or how to manage apps.

5.2.3 Social connection

Social media has the potential to be a useful tool for social connection and communicating with friends and family. Further, despite advice from Probation and Parole Officers to avoid using Facebook, participants in this study were still using it. In light if this, there is a need to provide advice or training about how to safely use social media, including how to re-establish a social media presence to avoid reconnecting with old friendship groups.

5.2.4 Job seeking

Training and support in the following areas is needed to ensure women ex-prisoners are equipped to locate job opportunities and apply for jobs:

- Women need assistance to understand which types of jobs they are likely to be eligible for – that is, the types of jobs that do not require a blue card or a police check. They also need to be able to assess a job advertisement to determine if they are a suitable candidate.
- Many participants described difficulties in the process of finding job opportunities to apply for. They are unable to replicate steps when they are shown how to search for jobs, particularly when time passes between instruction and attempting the task again. Training focused on skill development could address this issue, particularly if it is conducted over an extended period of time, so that participants have the opportunity to consolidate their learning.
- Developing a resume is a complex task, both in terms of developing the content and creating the document with word processing applications. Given limited access to computers across the cohort, and a lower level of computer skills compared to other devices, it is likely that many women ex-prisoners will benefit most from intensive, hands-on assistance with resume development.

5.2.5 Managing finances

Participants reported difficulties in engaging with government agencies, including setting up MyGov access. These difficulties can create stress related to finances, as access to payments may be delayed. Supporting women to engage with government agencies and set up MyGov access before they leave prison would assist in managing this. Alternatively, a series of short, step-by-step instructional videos related to engaging with government departments that could be made available to participants before their release would provide more tailored support.

6 Conclusion

This project has provided rich insight into women ex-prisoners' digital literacy, as well as their access to technology, and their technology needs and experiences. In doing so, it begins to address a significant gap in the research related to women ex-prisoners' lived experience of technology. Many of the assumptions in prison literature and indeed, our own assumptions, about how women leaving prison would use technology and their needs in relation to work, were unsupported. We do know that technology is important to women's lives, the ways that they integrate back into society and begin to rebuild relationships and lives. Our research identified significant barriers to technology use including low knowledge and skills, that technology is not prioritised or even recognised as relevant, problems around access to devices and data, and lack of explicit teaching and support in digital skills. We identified enablers of technology use such as adequate income, stable housing, confidence, social connections who can support and help technology use, and good mental health. Most importantly our research allowed women ex-prisoner's voices and stories about technology to be foregrounded in a way that is not common in literature and research about people's experiences on leaving prison.

Focusing on the barriers and enablers identified in this research, the insights generated by the data and the archetypes would be valuable for further research, in policy considerations for service support to women in transition out of the corrective services setting, and in designing and delivering effective support for digital literacies for this cohort.

Appendix 1: Indicative interview discussion guide

Indicative interview discussion guide

Setting up for the interview

- Check the participant is comfortable to start and ready to begin.
- Clarify expected max time 60 to 90 minutes.

At the start of the interview

- Turn recorder / recording software on.
- Greeting.
- Restate purpose of the project.
- Restate consent parameters and clarify agreement to participant.
- Remind participant that the questions are meant to stimulate their thinking. They can answer or not as they wish.
- They can add to or address aspects not directly in answer to the question but which come to mind.
- Advise the participant that the funding agency will not know names of participants.
- Check the recorder is working properly.

Interview questions

1. Please tell me a little about yourself. Prompt questions may include:
    a. When were you released from prison?
    b. Which correctional facility were you imprisoned at?
    c. How long were you incarcerated for?
    d. Was this the first time you were incarcerated?
    e. Please tell me about your work / study history
    f. Please tell me about your current job
2. What does the term 'technology' mean to you? What does it encompass?
3. Please tell me a little about your prior experiences with technology (ie before you were incarcerated). Prompt for experiences:
    a. Across device types
    b. Across contexts (work / study / personal life)
    c. With technology training
    d. About ways of accessing the internet – what is your preferred way of accessing the internet?
4. Please tell me about your expectations of using technology post release? ie What were your expectations before you were released about how you would use technology post-release?
    a. Have your expectations matched the reality?
5. Please tell me about your experiences with technology since your release from prison. Prompt questions may include:
    a. How have you been using technology? What have you been doing with technology?
    b. How important have technology skills or knowledge been in helping you to get (or maintain) a job / participate in study?
    c. Where / how have you been accessing technology?
6. What words would you use to describe yourself as a technology user?
7. What do you like / dislike about technology?
8. What barriers have you experienced to technology use?
    a. Before entering prison
    b. Since your release
9. What things (enablers) have helped you with technology use?
    a. Before entering prison
    b. Since your release

10. What, if any, support do you need for technology use?
11. Is there anything you would like to add?

Probe questions
These are indicative of further questions which may be useful, at any point of the interview, to clarify, extend or deepen the nature of responses:

- Could you explain what you mean by that?
- Could you tell me more about that?
- Do you have an example of that?
- Could you explain what would have countered that?
- How did that make you feel?
- What were you thinking as that occurred?

Conclusion

- Ask the participant if there is anything they wish to add**.**
- Thank the participant for their time and contribution to the project.
- Remind the participant of the contact details on the information sheet should they have any queries or concerns in the future.
- Wish the participant a nice day and close down the Skype or other application / hang up the phone.

After the interview
Ensure the sound file is saved as soon as practicable to the agreed online repository for safe keeping.

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