

TECHNOLOGY-FACILITATED DOMESTIC AND FAMILY VIOLENCE: WOMEN'S EXPERIENCES

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The use of technology, including smartphones, cameras, Internet-connected devices, computers and platforms such as Facebook, is now an essential part of everyday life. Such technology is used to maintain social networks and carry out daily tasks. However, this technology can also be employed to facilitate domestic and family violence. Drawing on interviews undertaken with 55 domestic and family violence survivors in Brisbane, Australia, this article outlines survivors' experiences of technology-facilitated domestic and family violence. The frequency and nature of abusive behaviours described by the women suggest this is a key form of abuse deserving more significant attention.

Key Words: domestic violence, technology, coercive control, abuse, online

Introduction

New technologies and digital media are rapidly incorporated into everyday life and intimate relationships (Baym, 2015). These changes bring benefits and risks to women's well-being and security, shaping their experiences of, and responses to, domestic violence (Freed *et al.* 2017). Devices and software—smartphones, mobile applications (apps), global positioning systems (GPS) and the Internet of things—can be used by perpetrators and their peers to escalate and amplify abuse (Southworth *et al.* 2007; Hand *et al.* 2009; Dimond *et al.* 2011; Douglas and Burdon 2018). Conversely, technology can be used by survivors and their allies to attain empowerment, share and seek information and support (Dimond *et al.* 2011; Woodlock 2015; Clark 2016), and challenge victim-blaming discourses (Dragiewicz and Burgess 2016). Media and practitioner accounts highlight how technology now manifests in domestic violence, but empirical research in this area has been slow to materialize. This article contributes to the evidence base on technology-facilitated domestic and family violence (DFV) by reporting empirical data about 55 women's experiences in Queensland, Australia (hereafter referred to as the *Queensland Study*).

Terminology presents several well-documented challenges when examining this field (Australasian Institute of Judicial Administration (AIJA) 2018). DFV is a preferred term utilized in Australia (AIJA 2018). This frame incorporates the dynamics and pattern of violence against intimate partners as well as recognizing that abuse extends beyond intimate partners into the family and household. In particular, DFV is a preferred term in Australia because it can include a variety of abusive relationships in culturally and

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linguistically diverse (CALD) and Indigenous families (AIJA 2018). The *Queensland Study* drew upon the *National Plan to Reduce Violence Against Women and Their Children* in defining DFV as

acts of violence that occur between people who have, or have had, an intimate relationship. While there is no single definition, the central element of domestic violence is an ongoing pattern of behaviour aimed at controlling a partner through fear, for example by using behaviour which is violent and threatening. ... In most cases, the violent behaviour is part of a range of tactics to exercise power and control over women and their children. ... Domestic violence includes physical, sexual, emotional and psychological abuse (Council of Australian Governments 2011: 2).

This definition was adopted because it aligns with contemporary legal frameworks in Australia and because our concern is with the social problem of DFV, which is increasingly conceptualized as coercive control. There is significant debate around how to define technology-facilitated abuse and stalking as potentially discrete forms of DFV. However, throughout this article, including in relation to the study results we draw upon, we understand technology-facilitated DFV to include the use of technologies such as smartphones, cameras, Internet-connected devices and computers, and platforms such as Facebook and YouTube, as part of the tactics in an overall pattern of DFV. It includes things such as defaming a partner on social media, identity theft, sharing personal details online (doxxing), unauthorized distribution of sexual images and sending abusive text messages (AIJA 2018). We note that although research is needed to understand the dynamics and impact of technology-facilitated abuse, these types of abuse are informed by and inextricable from the overall dynamics of gendered violence and abuse (End Violence Against Women Coalition 2013).

Coercive Control

Analysis of this study is underpinned by ‘coercive control’, a concept which, in various manifestations, has been used by domestic violence practitioners and scholars. In their early work, Dobash and Dobash (1980: 15) claimed that ‘violence in the family should be understood primarily as coercive control’. In 1982, Schechter (1982: 216) used the term ‘coercive control’ and suggested that abusers used physical, sexual, emotional and financial abuse and threats to dominate women partners, facilitating a pattern of coercive control. Pence and Paymar (1993) used a similar framework of power and control in explaining how men use violence against women in developing the Duluth model. However, although Stark (2007) did not invent the concept, his formulation of coercive control has been highly influential, though not, we recognize, without criticism.

Stark identified that DFV is characterized by a pattern of coercive and controlling behaviours enacted in the context of intersectional structural inequality (Stark 2007: 5). Gender, racialized, economic and legal stratification produces vulnerability to violence and shapes the forms it takes in specific historical, cultural and geographic locations. In a setting that normalizes many non-physically abusive behaviours in relationships, survivors and others may minimize these forms of abuse (Sharp-Jeffs *et al.* 2018). However, as Stark (2007: 218, 274) argues, ‘ordinary’ experiences of coercive and controlling abuse have cumulative effects that are at least as important as physical

violence in understanding the impact of the coercive and controlling behaviours that underpin DFV.

Stark outlined the particular characteristics of coercive control: the frequency and routine nature of violence, the personal nature of coercive control, the experimental nature of coercive control, the spatial and temporal extension of control, the prevalence and social structure of coercive control, the normalcy of coercive control and gender entrapment (2007: 203–211; Sharp-Jeffs *et al.* 2018: 165). Each of these dimensions is applicable to the accounts of technology-facilitated DFV in the *Queensland Study*. Accordingly, following George and Harris (2014), we argue that technology-facilitated DFV should be understood as a form of coercive control that is inextricably tied to, rather than separate from, DFV and the broader cultural values and practices that engender it.

The concept of coercive control is not without its critics. For example, Walby and Towers (2018: 11–12) have pointed to the difficulties associated with measuring coercive control and confusion about the meaning of the concept. Writing in the United Kingdom, where a crime of coercive control has recently been introduced, they suggest that in public debate, coercive control increasingly refers to non-physical abuse and excludes physical violence (Walby and Towers 2018: 11–12). In Australia, where some legislation now includes the language of coercive control in definitions of DFV, Rathus (2013: 377) has expressed concern that victims of DFV who cannot prove coercive control may be excluded from attaining legal remedies. Despite these criticisms, Stark's (2007) conception of coercive control continues to provide a helpful framework for understanding the tactics underpinning the perpetration of DFV and its impacts on women.

Literature Review

Technology in everyday life

The number of people who use the Internet and social media or own a smartphone is rapidly increasing across the globe. A Pew survey from 2015 found that across 32 countries, a median of 67% of adults reported using the Internet at least occasionally or owning a smartphone (Poushter 2016). A median of 87% of adults reported Internet use in advanced economies as compared to 54% in emerging developing nations (Poushter 2016: 3). Australians had the second highest Internet use in the world (after South Korea), with 93% of adults reporting Internet use or smartphone ownership as of 2015 (Poushter 2016: 4). Australians also report the highest daily use of the Internet in the world, with 77% of users accessing the Internet several times a day, and an additional 14% using it at least once a day (Poushter 2016: 14). Facebook is the most commonly used social media platform, with 17 million active Australian users every month out of Australia's total population of approximately 25 million people (Cowling 2017).

The adoption of technology has profoundly impacted on everyday life in myriad ways that we are just beginning to understand. Overwhelmingly, this has been characterized in positive terms. When asked to identify the biggest improvement in their lives in the past 50 years, 42% of Americans named technology, far outpacing the next highest choices: developments in medicine and health (14%) and civil and equal rights (10%) (Strauss 2017: 1). Certainly, digital devices and information and communications

technology (ICT) can provide benefits such as convenience, access to information and social connection. Increased Internet use is also correlated with shifting social dynamics whose implications are not yet clear. In addition, anonymity and pseudonymity online seem to increase aggression (Tsikerdekis 2012). However, anonymity may also be useful for those seeking support following stigmatized crimes, like DFV, where victim blaming is common (Stark 2007: 112–3). Anonymity and pseudonymity may be important for survivors of DFV as well, enabling them to seek information and advice while maintaining their privacy and maintain privacy online following separation from an abuser. More empirical research is needed to better understand the dynamics and impact of technology on DFV and other social problems and their potential solutions.

DFV and technology

Much research related to technology-facilitated harm has focused on online fraud, bullying and sexual harassment; sexting; and image-based sexual abuse (e.g. Cross *et al.* 2016; Henry *et al.* 2017). Many of these studies measure decontextualized behaviours with little attention to the relationship context or what they mean to those involved (Harris 2018). Despite research documenting correlations between in-person abuse and technology-facilitated stalking (e.g. Aghtaie *et al.* 2018; Barter *et al.* 2017; Marganski and Melander 2018), much of the literature on what has been variously termed ‘cyber abuse,’ ‘electronic intrusions’ and ‘social media surveillance’ relies on self-report surveys of specific online behaviours such as frequent texting. This largely omits the context, meaning, or outcomes of measured behaviours. This can result in survey findings that vary widely, with some overestimating and others underestimating the social problem of technology-facilitated abuse. For example, Brown and Hegarty’s (2018) review of digital dating abuse measures found prevalence rates ranging from 6% to 91% (2018: 47). Decontextualized behavioural measures can produce ambiguous findings that mirror and magnify the problems associated with measuring offline violence and abuse (e.g. DeKeseredy and Schwartz 2000; Johnson and Ferraro 2000; Brown and Hegarty 2018). At the same time, many relationship-specific forms of DFV will inevitably be left out of online abuse measures designed for a general population, resulting in under-reporting (Hamby and Turner 2013). Hamby and Turner note that ‘decisions about operationalization have a significant impact on apparent gender patterns’ and prevalence rates (2013: 332). Recent efforts to operationalize and quantify control have further muddied the waters, as the same behaviours can have different meanings when used by an abuser or by a teenager joking around with a friend (Hamby 2015).

Although not all technology-facilitated abuse occurs in the confines of DFV, the large number of anecdotal examples in the *Queensland Study*, as well as other emerging research (Hand *et al.* 2009; George and Harris 2014; Woodlock 2015; 2017; Freed *et al.* 2017) suggest that technology is increasingly important to the dynamics of DFV. The challenges of quantitatively measuring abuse emphasize the need for qualitative, empirical research to examine and explain the role and implications of technology in DFV. As the quotations later illustrate, researchers need to listen to survivors in order to understand the many ways that abusers use technology as part of DFV. The wide variety of examples point to the ways that standardized measures may miss serious forms of technology-facilitated control and abuse, resulting in under-reporting. Although

technology-facilitated abuse is likely to be just one aspect of the DFV experienced by a person, it is useful to examine it discretely as it may raise specific issues for how to appropriately respond to that aspect of the abuse.

Methodology

In this section, we draw upon qualitative research that set out to examine how women who had experienced DFV engaged with legal systems. The study was conducted by Douglas and is referred to as the *Queensland Study*. Throughout 2014–2017, Douglas conducted interviews with 65 women, on up to three occasions, over three years. At the first interview, 55 of the participants (the vast majority—85%) identified technology-facilitated abuse as part of the pattern of the DFV they experienced. At the second interview, 20 of the 59 (34%) continuing participants identified technology-facilitated abuse as part of the pattern of the DFV they experienced and at the third interview, 13 of the 54 (24%) continuing participants identified it. For all of the women in the study who experienced technology-facilitated abuse, it was just part of the abuse they experienced over the course of their relationship and in the time after separation from the abuser. At the second interview, women were asked ‘what was the most difficult aspect of the abuse to deal with’. Of the 59 women who answered this question, 41 (83%) identified emotional or psychological abuse as the most difficult aspect of the abuse they experienced. This type of abuse occurred in a range of ways, sometimes via the use of technology, e.g. through insults and harassing messages delivered via technologies including text messages, emails and online social media platforms.

During the interviews, participants were asked about their experiences of DFV and their engagement with legal processes as a result of these experiences and it was in response to these enquiries that participants reported examples of technology use by their abusers. Although the women identified technology-facilitated abuse in accordance with our aforementioned definition, they did not refer to it by that label, rather they described the type of technology and how it was used in the context of DFV. Pseudonyms are used when referring to the participants’ comments to protect their confidentiality and it is noted whether the participants are from a CALD background. The *Queensland Study* was approved by the ethics board at The University of Queensland, approval number 2014001243.

In recruiting for the *Queensland Study*, women were approached by their DFV support workers or lawyers from a range of organizations in Brisbane, Australia, who discussed the study with them and arranged interviews if the woman was interested in participating. The women were all more than 18 years old, had experienced DFV from their current or previous male intimate partner in the six months leading up to the first interview and engaged with the legal system in some way to respond to the violence. Two women heard about the study and contacted Douglas directly requesting to be involved in the study. The women interviewed for this study were diverse in age, marital status, relationship duration, educational attainment and employment status. At the first interview, their mean age was 39 years (standard deviation = 9), ranging from 23 to 68 years.

The majority of participants were Australian born or had migrated to Australia with their families when they were children ($n = 40$; 61.5%). Although six of the women (9%)

who took part in the study were Aboriginal and Torres Strait Islander, none of these women identified forms of technology-facilitated abuse or stalking. Of those 25 (37.5%) women born overseas (CALD women), nine had been living in Australia for five years or more, 13 for two to five years and three for less than two years. Just over half of the participants had been married to the abuser ($n = 35$; 54%) and 26 (40%) had lived with him. Most of the women had mutual children with their abuser ($n = 48$; 74%). Women spent between one and 29 years in their abusive relationships, with a mean relationship duration of 9.6 years. At the first interview, three women were still living with their abuser, two other women returned to live with their abusive ex-partner but one of them had separated again by time the third interview was conducted. For those who were separated at interview one, most ($n = 44$; 69%) had been separated for less than 4 years, with 18 (28%) separated for more than one year but less than two years and 14 women (22%) separated less than one year.

Overall, the sample of participants was highly educated. The highest level of education attained for 28 (44%) women was a university degree (bachelor's degree or higher), 16 (25%) had a diploma or advanced diploma, 10 (15%) had completed year 12 and 11 (17%) had finished school at year 11 or earlier. Approximately half of the women ($n = 30$; 46%) were employed either part-time or full-time at the first interview. Nearly half of the women ($n = 32$; 49%) relied entirely on social security payments and at the first interview, and three women had no employment or access to social security because of their visa status. All of the participants had experienced multiple forms of abuse during the relationship and for many of the women the abuse had continued post-separation.

The women's comments about their experiences of technology-facilitated DFV are outlined and analysed later. Significantly, participants in the *Queensland Study* were not asked specifically about technology-facilitated DFV. The fact that so many women volunteered information suggests technology is increasingly featuring in the dynamics of DFV. We do note that even more participants would likely have reported additional incidents and more detailed information in a study designed to systematically examine and account for this harm.

Survivor experiences of technology-facilitated DFV

The *Queensland Study* participants reported both positive and negative uses of technology. In the first interview, 15 survivors highlighted how technology was used in a positive way to record abusive behaviour for evidence purposes [reported in Douglas and Burdon (2018)] and to document their responses to abuser's allegations ($n = 9$); save compromising pictures of their partners to justify separation to their partners or to their partner's relatives (Radha); and for their own protection [using, for instance closed-circuit television (CCTV) and GPS]. During the first interview, three of the study women reported installing cameras around their homes for security purposes. Another woman, Kim, reported that she wore a device attached to GPS that she could activate to alert police if she was in danger, and Susan paid to use a website to manage communication with her abuser about their child.

Over the course of the three interviews, many women reported they had taken action to stop technology-facilitated abuse. For example, by blocking contacts on their social media, mobile phones or email ($n = 14$); disconnecting from social media ($n = 4$); changing their

phone number or email address; or getting a new phone ($n = 6$) or changing their security settings ($n = 2$). Dara had disposed of the SIM card from her partner's computer where intimate images were stored and Leah smashed the recording devices she found around her home. Gillian reported that child handovers were a particularly risky time for her and so she ensured that child handovers occurred at a public place with CCTV in place. Sandra and Bianca had learned how to check their children's phones for new apps after contact visits. Several women ($n = 17$) also used legal responses. These responses included reporting technology-facilitated abuse to police, adding specific conditions about technology-facilitated abuse on their civil protection orders and organizing for lawyers to send letters to abusers asking them to cease using technology in particular ways to enact harm.

However, overwhelmingly discussions centred on adverse effects of technology, specifically about how perpetrators used devices, software and ICT to control and intimidate victims. Participants reported that mobile phones were often used by abusers for harassment, with abusers making multiple calls and texts with abusive or threatening messages or through sending intimidating or embarrassing photographs. At the first interview, 47 women reported that their mobile phones were used by abusers as a tool of abuse. Women spoke of their phones being monitored. They reported that abusers sometimes controlled their use of phones, destroyed them, deactivated their accounts and added applications (e.g. location-based tracking apps) without their consent. Women also reported the misuse of social media and other web-based platforms, email and Skype. A breakdown of the various technologies used by abusers is shown in [Table 1](#).

Increasingly the legal definition of DFV in Australia includes behaviour that is coercive and controlling ([Rathus 2013](#)). Under this broad umbrella, a number of behaviours and forms of abuse are captured. These include actions that aim to isolate the survivor,

TABLE 1 *Queensland Study—type of technology used*

Abuse technologies	Interview 1 (number of women)	Interview 2 (number of women)	Interview 3 (number of women)
Smartphone	47	14	7
• Text	20	10	5
• Call	19	4	1
• Record	5		
• Photograph	6	2	
• GPS	1	1	1
• Monitor	6		
• Destroy/deactivate/take away/ limited use	16		
Facebook/social media/web-based	14	7	3
Email	5	8	5
CCTV (hacking, secretly installing)	2		
Other recording device	4		
Other GPS device	2		
Skype	0	1	
Computer (hacking, monitoring use)	3		

The bold values are used to distinguish the overall numbers of users of Smartphone, facebook/social media, email, CCTV, other recording device, other GPS device, Skype, and Computer. The unbolded numbers are subgroups of the way Smartphones are used.

monitoring and stalking, sexual abuse (through the sharing of or threat to share sexual images), emotional abuse through the use of social media and harassing behaviour (AIJA 2018: §3.1.6). As the participants in the *Queensland Study* identified, many of these behaviours are performed with the assistance of technology. At the first interview, the most commonly reported type of technology-facilitated abuse women reported was harassment ($n = 39$). Monitoring and stalking was the second most commonly identified form of technology-facilitated abuse at the first interview ($n = 20$), followed by isolation ($n = 12$), social-media-facilitated abuse ($n = 11$) and, least commonly, image-based abuse ($n = 8$; see Table 2).

At the first interview, women revealed that they experienced different types of abuse that were carried out with a variety of technologies, as outlined in Tables 3 and 4. Although most women at the first interview reported the use of one type of technology to perpetrate one form of abuse ($n = 37$), 18 women reported that their abuser used two or more types of technology (e.g. smartphone texting and Facebook) to perpetrate two or more types of technology-facilitated abuse (e.g. monitoring and harassment).

In the following sections, we draw on the women's comments about technology-facilitated abuse.

Isolation

Technology is increasingly a part of social engagement and communication and required to carry out the most basic functions of everyday life, including paying bills and ordering shopping. Consequently, abusers can control a survivor's digital participation and daily activities by restricting access to technology, even after separation (Woodlock 2017). This was certainly captured in Colleen and Dara's accounts, which outline how control can be exercised through technology, and result in potentially dangerous isolation from friends and family. Colleen explained how she placed trust in

TABLE 2 *Queensland Study—experiences of technology-facilitated abuse*

Experience of technology-facilitated abuse	Interview 1 (number of women)	Interview 2 (number of women)	Interview 3 (number of women)
Isolation	12		
Monitoring and stalking	20	2	1
Image-based abuse	8	3	
Social-media-facilitated abuse	11	6	3
Harassment	39	12	10

TABLE 3 *Queensland Study—number of women who reported multiple types of technology-facilitated abuse*

Technologies used by abuser (see Table 1)	Interview 1	<i>n</i>
1 type		37
2 type		13
More than 2 types		5
Total		55

TABLE 4 *Queensland Study—Number of women who experienced multiple types of technology-facilitated abuse*

Types of experiences of technology-facilitated abuse (see Table 2)	<i>n</i>
Interview 1	
1 type	37
2 types	10
More than 2 types	8
Total	55

her new partner to help her set up her accounts and devices such as mobile phone and computer, suggesting that expertise about technology is gendered: ‘What better way to control someone’s life than with their internet ... and technology. That’s pretty much it ... it’s a man’s playground. When a woman moves into a house she gets the bloke to plug in the devices. Can you take care of the internet provider? You use these codes ...’ Her abuser had installed the various technological channels she utilized and so was able to continue to manage her access points, even post-separation. As she explained:

... he checks all my phones, controls all my computer, controls all my phone, controls all that stuff. ... The worst bit for me has been that he has controlled all my passcodes for three years since we separated and it has taken me 37 hours with Apple in Melbourne, Singapore and Sydney to unravel the codes and the maelstrom. So basically I couldn’t even get emails from people - I was cut off from my entire social circle. He can remotely hack in.

Similarly Dara (a CALD participant) described how her abuser severed her connections to resources and her social circle, which were facilitated by technology:

He totally destroyed ... my laptop. My email accounts, password, he changed, that’s why I can’t access my bank. I can’t see my bank account, anything, he changed everything. ... He steal my mobile. ... It’s my life this is just ... my contact point and I always use the cheapest thing. That was just ... special for me. He stole it.

Both Colleen and Dara’s comments, earlier, emphasize how isolation can result from an abuser’s management of technology. This was referenced by many participants in the *Queensland Study* and indeed is reported elsewhere in the literature (Woodlock 2015). Such behaviour has particularly destructive implications for women who have recently arrived in a new country. Radha, for instance, used Skype to maintain contact with family and friends living overseas. Her partner intermittently disabled the platform, which became a ‘tactic to pressurize me’. He would grant access when she conceded to his demands, such as ‘when I agreed to make him breakfast ... it was just to make me ... do something’. She noted that ‘He used to torture me for everything’. Restricting access to such communication channels and other technological features was a tactic employed to control her: ‘Like if I don’t listen to him he would just switch off the internet or hit me or cut off my needs’.

Abusers’ control over technology has implications for survivors’ help-seeking processes. Jacinta explained that she tried to use her phone to call the police on one occasion but her partner ‘grabbed [my phone] out of my hand and he’s hurled it across the room, and restrained me from leaving the room’. Some women explained that they were never allowed to access to mobile phones. Roseanna said: ‘No, I never had them things, I wasn’t allowed them’ and Kim explained: ‘he bought mobile phones, but then

he would intermittently have them cut off'. Terri reported that she had 'no just mobile phone, wasn't allowed to have Facebook or anything. ...' These examples show how technology can be used to extend abusers' spatial and temporal control, imbuing normal, everyday activities with anxiety and fear (Stark 2007).

Monitoring and stalking

Another aspect of abuse that many women identified was constant monitoring of their use of technology by the abuser and relatedly, the perpetrator's use of technology to monitor their behaviour. Such behaviour may suggest that the woman is at risk, as monitoring is recognized as a form of stalking and stalking has been identified as a risk factor for future serious harm (Campbell *et al.* 2003). Angelina's (CALD background) comment highlights that the perpetrator monitored her use of technology despite her openness. She said:

... [he] checks [the] phone but I never hide nothing. I had a password on his computer, like guest. He always can go and check. ... Check history on internet. Even when we had the argument, for example, 'why you looking for Australian holiday? I mean you should [be] looking for job' ... how he can know that for example during the day I was [looking for holidays]. I said, 'tell me, why do you think I was – yes I was [looking] but how do you know?' He said 'because I watching history on internet'.

Similarly Bianca reported:

... he'd placed a key logger on my computer and I'd found it. ... After this we resolved the issue and I said to him 'look, you can have all my passwords and my Facebook passwords and things, I don't have anything to hide. It's creepy that you are logging into my internet activity'. ... He said he was trying to keep me safe so ... he could protect me.

Provision of technology too was sometimes openly used by perpetrators to enable surveillance of survivors and create the sense of 'omnipresence' Stark has identified, by 'letting the victim know she is being watched or overheard' (2007: 255). When Celina (CALD background) arrived in Australia to live with her new partner, he provided her with a mobile phone that he managed and regularly checked:

Of course I didn't have a mobile phone. I was using his personal mobile. ... I was still new to this country and I didn't have anything. ... He was carrying the office mobile with him all the time. The personal mobile he gave it to me. During the day he could call me and tell me 'okay you do this and that' during the day ... every day after work he came home, he took the personal mobile that was with me and went to the toilet and browsed the history and everything.

Celina was not financially independent and relied on her partner to supply all her needs. It was not possible for her to buy a phone.

On other occasions, monitoring is undertaken in a more covert way. For example, GPS is now easily and potentially secretly installed on a variety of devices—including but not limited to phones, children's toys and cars—and can be used to review and track the movements of a survivor. Advertisements for such software emphasize its advantages and these include finding friends and checking their whereabouts (Family Safety Production 2017). Given the potentially covert nature of this form of monitoring, it is likely that some of the women in the *Queensland Study* were not aware they were

being tracked. However, a number of the women in the *Queensland Study* did identify the use of GPS tracking by their partners. On some occasions, women identified that their own lack of understanding of technology, compared to the level of understanding of their partners, made them more vulnerable to abuse. Bisera (CALD background) explained that ‘by that time I wasn’t very sure what he was doing but he asked me to confirm some request on my phone. I didn’t know what that was. I confirmed and then I asked him “what was that?” He told me “if you get lost I can find you now”’. Although Bisera had separated from her abuser and changed her phone, she was unsure about whether she was still being tracked by her former partner. She said: ‘I still think he can trace me even now’. Similarly, Pari (CALD background) reported:

I observed that whenever he came home, he always take my phone and he search my phone like anything, for one hour. So on that day, I was very - like I find it very fishy that on that day I searched my phone as well, like something is wrong. So I see that he has put his number authorising him to locate me through a GPS with my phone, where I am going or where I’m coming. ... So I was like, ‘look, this is not acceptable, this is not right. If you want to do it, let me know at least. Without my knowledge, without my consent, without my concern, you are doing this’. So I deleted his number from that GPS location searching thing. Then he got annoyed and then this was first time he hit me.

The aforementioned examples illustrate the utility of technology to what Stark calls the experimental nature of coercive control, wherein abusers devise idiosyncratic rules and micro-regulations in order to enforce their partner’s obedience (Stark, 2007).

Perpetrators used a range of techniques and sometimes proxies or networks to monitor women. Ingrid (CALD background) reported that her husband persistently texted her and ‘went through’ her emails. After they separated, she moved into a shelter and her ex-husband gave their daughter a doll. Later he revealed he knew her address at the shelter. Eventually she realized that he had inserted a GPS device into the back of the doll. She questioned ‘Why is he wanting me always to take this doll if I don’t need it?’, noting she was ‘always really suspicious of the doll’. She recalled that ‘we took the doll to the dinner and I opened it. Like I unstitched the back that he always kept closing and yeah, then I found like this black box underneath the motor of the doll’. The disclosure of the shelter address resulted in Ingrid having to leave the shelter and find alternative accommodation. This was frightening but was also difficult and disruptive for her daughter. Thus, the impacts of the technology-facilitated DFV can transcend their primary target to affect others.

Use of location-based tracking technology in intimate relationships and post-separation is perhaps the most blatant example of what Stark (2007) calls spatial and temporal extension of control. GPS tracking removes the physical boundaries of the abuser’s control, eliminating the need for his proximity and allowing tracking their targets over time, potentially extending post-separation. In the *Queensland Study*, several women reported instances of location-based tracking or fears that it had been used, for example, in vehicles. Fiona was concerned that her ex-partner always seemed to appear where she was and observed her car’s battery draining quickly. At the time of the third interview, she was in the process of having her car inspected to see if there was a GPS device installed. Carol explained that her partner sometimes rang her and said ‘I will meet you around the corner from [place]’ and she would wonder how he knew where she was. She speculated he may have put a ‘GPS tracker’ in her phone. Kim reported that her ex-partner put a GPS tracker on the car. She also recognized that like other

devices, software and ICT, GPS had positive features for DFV survivors and had an SOS device around her neck that was connected to the local police. She had activated the device once and the police had been able to come to her aid immediately.

Image-based abuse

As a result of technological advancements, cameras can be relatively easily used. Like Kim, some women in the *Queensland Study* saw this technology as offering a means of protection and had installed CCTV cameras around their residences. One such survivor—Sandra—recounted that she had worked with a domestic violence support service for 18 months and ‘had enough evidence [of violence and threats of violence – mostly recorded on her phone] there to show them and they funded me surveillance cameras for my house ... that’s my safety. It’s empowered me now ...’ However, in a number of cases women reported that cameras were used to monitor their activities, or that perpetrators used digital images to facilitate further abuse.

Fiona reported that her ex-partner set up night vision cameras in her bedroom. She explained they were ‘set up in the house, underneath the house. ... By him ... my eldest found some of the cameras and the camera [was] set up underneath the house. ... I found the set top box hidden under pavers underneath the house’. Similarly, Susan’s partner installed CCTV cameras throughout the house on the pretext that she could see their baby in each room. She reported:

He managed to get the [camera] at home working and he would use that to spy on me all day ... he would move the cameras around following me, and he would text me, going, ‘what are you watching on TV?’, as I was sitting on the couch. There was one - a couple of instances where I was breastfeeding [our child] or I’d just come out of the shower, naked, and the camera was turned towards the bathroom. I would say to [him], ‘can you not do that?’ It was the camera that was - he’d placed it right on top of [the baby’s] cot, but it was faced towards the bathroom, or towards me on the bed breastfeeding.

In other accounts too, women identified non-consensual images (still or video) captured by perpetrators using technology. Dara (CALD background) had moved to Australia to marry her Australian citizen partner. Shortly after she arrived, the relationship became abusive and Dara left the relationship. However, she was persuaded to return one evening to cook her ex-partner’s dinner. When she arrived at the house, her ex-partner forced her to have sex with him. She recalled that:

After sex I saw that he has captured it on video camera. That time I was scared. He was in the bathroom and I take the memory card from there, I didn’t tell him and I told him that ‘no, I am feeling bad, I don’t want to cook, I want to go home’. ... After that when I arrive home and I just think what I do ... he come and he was very angry, ‘where is my memory card, give me’. ... I ask him that ‘why you capturing this? Why you capturing husband and wife intimate things? Why? Can you answer me?’

Dara believed her ex-partner intended to use the video to threaten her in the future. Radha (CALD background) had a similar story. Her partner had taken ‘intimate pictures of when we were together and I was not fully clothed’. She described how her partner had threatened to upload the pictures on the Internet to coerce her to change her evidence at a forthcoming protection order hearing. She said ‘so if he uploads

those pictures on internet that's very disrespectful'. Similarly, Sally, who has an intellectual disability, described how she was pressured by her partner to let him take intimate pictures of her and then used threats of dissemination to control her: 'He would threaten to share. ... They were very personal. Photos of like my undies and my bra. ...' Relatedly, Colleen identified the emerging links between the availability and use of online pornography and DFV (DeKeseredy and Hall-Sanchez 2017): 'So you have no control over your internet or computers. He'll spy on your internet. He'll reject you intimately in favour of internet porn and then come in and treat you like you're internet porn'. These examples of image-based abuse illustrate the range of uses of image capture in DFV. Stark has observed that abusers often (believe they) have 'privileged access and property rights' to the home (Stark 2007: 207–208) and this facilitates access to images. In addition to pervasive monitoring, image-based abuse deploys 'gender entrapment' via micromanagement of gendered expectations for behaviour and sexual double standards that can be used to shame and coerce the woman whose image was captured (Stark 2007).

Social-media-facilitated abuse

Although Facebook and other social media platforms can help women who are experiencing abuse to maintain their social connections and to seek help, it can also be another tool for the perpetration of abuse. Lisa pointed out how Facebook could be used to monitor behaviour and social life: '... we also had each other on our accounts as friends. So he knew who I was talking to or whatever else. You know how it is. You can monitor'. Jacinta reported that when she first met her ex-partner, she added him on her Facebook account and 'he sent out a friend request to every single person I have on my Facebook page'. This meant that her partner quickly became embedded in her online social circle. Similarly, Celina's (CALD background) ex-partner tried to follow all of her friends with difficult consequences for her:

... later on my friend asked me to remove my profile from her list because she believed this man had been following her profile because I was there as a friend in the first place. So he's searching the internet for people that you're following ... he should be stopped from following my friends on social media.

These examples illustrate how abusers manipulate the social context that survivors inhabit throughout the course of the relationship, often well before the women realize they are in a violent relationship. These accounts demonstrate several aspects of coercive control, showing how abusers can leverage their privileged access to a partner's social network to interfere with potentially important or supportive relationships, extending their temporal and spatial control via ostensibly friendly online socializing (Stark 2007).

It is also possible for perpetrators to abuse and harass via Facebook. As Alex describes: 'he had put Facebook posts on my friends' business page - their work pages - saying that we had illegal guns and that I was child abusing, that I was a child abuser and that my parents were holding illegal guns and he put my name and address and everything on there'. Similarly Jacinta explained that if she didn't answer her ex-partners' calls, he would become abusive via Facebook:

... he'd go straight to Facebook, straight to my Hotmail page, straight to my email address, and send lengthy horrible emails. ... He'd go through the private message box, he wouldn't post it so that anyone else could read it, but he'd send messages via there saying 'pick up your phone, why do you have to be so difficult? Why do you have to be such a bitch? Pick up your phone', blah-blah. [I] blocked him [on Facebook] so he can't see anything that's going on ...

Although use of social media platforms such as Facebook is a normal feature of daily life for most Australians, many women who had experienced DFV felt compelled to disconnect from technology to escape abuse and monitoring by perpetrators. This often resulted in isolation from friends, family and other social and work opportunities, whereas their abusive ex-partners usually continued to have free range online. As Stark has theorized, '[p]ersons subjected to constant or visible surveillance become isolated from outside support or isolate themselves' as a consequence of perpetrators' monitoring practices (2007: 255). Julia reported that she had deleted her Facebook 'for a long time' just to avoid her ex-partner. Anna was clearly terrified of her ex-partner and made the link between her online and physical safety: 'I don't know if he's on Facebook. I've blocked all his friends and family. I've changed my number for the fifty millionth time because of the harassment. I've had to change everything. I've had to change my locks just to be sure. I sleep with a knife under my bed'.

However, despite disconnecting from ICT, some women reported that they continued to be abused indirectly through this medium. Evie, for instance, had disconnected from Facebook and had a protection order against her ex-partner that clearly stated he must not use social media to carry out DFV. Regardless, Evie's friends informed her that he issued threats and tried to harass her through messages sent to her network on Facebook. Francis had a similar story; she stated that she had received abusive messages via Facebook. Although Francis had blocked her ex-partner, his sister-in-law sent abusive messages to her. These comments demonstrate how abusers overtly and covertly commission networks to facilitate the perpetration of DFV.

Celina's (CALD background) comments encapsulate the centrality of freedom on social media to freedom in social life:

I want to feel free when I'm on the internet and I think I should have the right to be in social media just like him. I should feel very safe to have friends in my profiles and I should ... I should be free, yes. ... I should have the freedom to be with my friends in Google+ or Facebook or in any social media. But this is not the case with me right now. It's different. Now I have to be ... away from all kinds of social media because there's this man and I'm afraid he'll do something through the internet, through social media and I have to keep myself away from all of that. I have to lead a kind of very lonely unsocial life ...

Her comments show how a perpetrator's control over a survivor's access to social media limits her freedom in social life, and is a form of DFV. Celina's comments reflect Stark's claim that, at its heart, coercive control is a liberty crime (2007). The stories in this section reveal the double-edged nature of social media as both a pervasive part of everyday social life and also, potentially, a tool or tactic of abuse. These accounts also draw attention to the disproportionate burden on survivors to protect themselves via withdrawal from useful technologies. This aligns with the 'prevalence and social structure of coercive control', wherein the victim of abuse is presumed to be the one with the problem (Stark 2007: 210). Abusers effectively become invisible as routine mistreatment of women is assumed to be the cost of digital activity. Rather than incorporating the

realities of abuse into design, platforms increasingly push responsibility for managing the harms caused by social media onto the victims ([Dragiewicz et al. 2018](#)).

Harassment

Women frequently reported that their abusive partners used a range of technologies to facilitate harassment. The place of technology in our lives, the uptake of technology and the availability of devices such as smartphones means that it is relatively easy for a person to swap between text, email and social media. This was evident in Maddy's case. Her partner used Facebook to monitor her and also constantly sent texts and telephoned her, again creating a sense of omnipresence ([Stark 2007](#)):

At one stage if I didn't pick up, he had called me 14 times one day from 3 am until 7:30 in the morning saying that he had been on Facebook, because he works shift work ... and saw that I was active on Facebook and that meant that I was on Facebook so that I now should answer his phone calls. I wasn't on Facebook, I was asleep.

Jacinta reported: 'I'd get all the abusive phone calls, being called everything from under the sun'. She also said: 'There isn't one single day in over a year long relationship that he didn't ring me at least 10 times a day ... he once in a period of six hours rang 109 times and texted 178 times'. Evie reported that even after separation, her ex-partner continued to harass her:

The text messages, I'd get 40 a day. They'd be like - even the police said they're like novels. Like he'd go back two and a half years ago, 'you're the one who left me, you're the one who did this, you're the one who did that' ... [He'd] call me names. ... It's all about what's happened years ago.

Monica had a temporary protection order and a family court order that circumscribed the behaviours of her ex-partner and established clear limits on his contact with their children. He was only allowed to contact her about the children via written communication, including texts. She reported, however, that he would text 15 times a day always mentioning something about the children. Milly had a similar experience; she reported her ex-partner 'blended family with DV' and sent 'abusive emails, abusive phone calls ...' always mentioning the children. The deployment of multiple technologies to perpetrate DFV foregrounds the repetitive, additive and ongoing nature of coercive control and its distinctiveness from crimes already captured by the criminal law ([Stark 2007](#); see also [Douglas 2015](#)).

Discussion and Conclusion

The women's experiences of technology-facilitated DFV, reported in the *Queensland Study*, support and extend the extant research on DFV and coercive control. Similar to other research ([Woodlock 2017](#)), the *Queensland Study* participants provided many examples of technology being used by perpetrators to isolate, stalk and emotionally abuse them and to create a sense of the perpetrator being omnipresent. The women's narratives provide important contextual data to inform our thinking about past and future research on technology-facilitated violence and abuse. For example, there is already research that identifies the particular vulnerabilities faced by CALD women who experience DFV ([Cavallaro 2010](#)). Some of the CALD participants in the *Queensland Study* identified they were reliant

on technology to maintain contact and connection with family and friends in their home country when they were newly arrived in Australia (e.g. Dara and Celina). CALD women on some Australian immigration visas are reliant on their partner's support and do not have independent access to social security (Cavallaro 2010: 17). This means they are not able to purchase their own technology. In circumstances where CALD women have no independent access to financial support, the perpetrator's dual control of finances and technology may result in exacerbating isolation for this group of women, heightening their risk of harm. This issue warrants greater attention.

Although a number of women used technology to document the abuse, to improve their safety and to stop the abuse, some of the women in the *Queensland Study* also pointed to their lack of understanding or skill with respect to technology compared to their abuser (e.g. Colleen and Biseria). Increasingly, in the Australian context, organizations have been working to help people to develop safe practices and knowledge around technology (e.g. Office of the eSafety Commissioner 2018; WESNET 2018). However, so far, there are no specific programs that target CALD women, especially new arrivals, and this may be an area for development. Several of the *Queensland Study* participants had responded to the technology-facilitated DFV by disconnecting (e.g. Julia, Evie and Celina). Although some support services recommend such 'technology detox' or disconnect as a response to technology-facilitated abuse (Levy 2015: 687), this response is problematic on at least three grounds. It is unfair because it is the abuser who has misused technology rather than woman who has been abused, and yet she pays the price. It is impractical because increasingly even routine services and activities require a connection to technology. It is also potentially unhealthy because it increases isolation and may obstruct the woman's ability to engage in work, education and social life.

The survivor accounts highlight the importance of studying the context, meaning, motives and outcomes of technology-facilitated activity. In particular, survey research focused on the prevalence rates of behaviours that are ambiguous is likely to be misinterpreted or misleading, given the diverse uses of technology by abusers and survivors in the context of DFV. Technology-facilitated behaviours such as frequent texting and location tracking may have positive as well as negative meanings depending on the relationship context. Researchers cannot assume the meaning of technology behaviours without investigating their context.

Technology-facilitated abuse is just one aspect of the complex pattern of DFV experienced by individual women (Stark 2007: 33–34; AIJA, 2018: [3.1]). Although it is important to understand the complexity of women's experiences of DFV and to avoid understanding the experience and impact of DFV as a discrete incident or set of discrete incidents, at the same time it can be useful to separate out the various aspects of DFV so that appropriate responses can be developed. This approach has been important in other aspects of research about DFV. For example, better understanding of reproductive coercion in the context of DFV has led to improvements in screening and the role of long-acting reversible contraception (Miller *et al.* 2010). The recognition of animal abuse in the context of DFV has led to the development of animal shelters so that women are more easily able to leave DFV (Flynn 2000). Improved understanding of how technology-facilitated abuse operates as part of DFV will assist in developing appropriate responses to this aspect of the abuse.

Although the *Queensland Study* was not specifically designed to gather information about technology-facilitated DFV, 83% of the women volunteered information about this phenomenon. The frequency and nature of abusive behaviours described suggest this is a key form of abuse deserving greater attention in the literature. There are

numerous potential sources of information to move the research in this field forward. In addition to purpose-designed qualitative and quantitative studies focused on DFV, service provider records, police data and court files likely contain a wealth of information about technology-facilitated abuse that is yet to be explored. Online discussion forums can provide information about the ways abusers, survivors and advocates share technology strategies with one another. Technology companies also have metadata about reports of abuse that may provide useful material for further research.

Future scholarship should continue to investigate the helpful uses of technology, including apps and online support groups, to better understand how survivors and advocates can increase safety and well-being as well as potentially prevent DFV without disengaging from technology (Finn and Atkinson 2009). This is vital, given the ubiquitous role of technology in building and maintaining social networks and engagement in public life. Scholars also need to investigate the ways that abusers manipulate their partners using apparently positive behaviours related to technology. For example, ‘friending’ contacts, providing a phone and paying the phone and Internet bills may be positive or negative behaviours depending on the relationship context.

Research on the ways emerging everyday technologies fit into DFV is a vital area of inquiry. Significant empirical research on technology-facilitated DFV is emerging from computer science scholars and advocates (e.g. Freed *et al.* 2017). Interdisciplinary research teams are beginning to better elucidate the dynamics and impact of technology-facilitated DFV and identify platform design features that exacerbate abuse (Arief *et al.* 2014). Likewise, co-design projects with multiple stakeholders are beginning to guide developments in technology, law and regulation to better meet the needs of survivors. For example, an online healthy relationship tool and safety decision aid for women experiencing domestic violence is currently being trialled in Australia (Tarzia *et al.* 2016). The survivors who shared their stories in the *Queensland Study* have provided an important piece of the puzzle, building evidence to support future practice for safety.

Data Availability

For more information about this study, see: *Using Law and Leaving Domestic Violence*: <https://law.uq.edu.au/research/our-research/using-law-and-leaving-domestic-violence-project/using-law-and-leaving-domestic-violence> (accessed 8 December 2018).

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