### Technology-Facilitated Domestic Abuse: An under-Recognised Safeguarding Issue?

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#### Abstract

Responding to domestic abuse is a key element of social work practice, in both child protection and adult safeguarding. This article sets out the ways in which rapid technological advances are being co-opted by perpetrators of domestic abuse to create new ways of exerting control. After starting with a brief reminder of recent UK legislative changes around domestic abuse, the article outlines the main ways in which technologies, including mobile phones and other Internet-enabled devices, are used by abusers for surveillance, monitoring, tracking and otherwise controlling all aspects of the lives of those they target. The article then moves on to consider how some groups may be at greater risk than others of technology-facilitated domestic abuse (TFDA), including women with insecure immigration status, women with learning disabilities and younger women and girls. Finally, the key social work tool for assessing risk in relation to domestic abuse is critiqued as lacking sufficient focus on TFDA. The article concludes by suggesting what individual social workers and local authorities need to do in order to better respond as TFDA continues to evolve.

Keywords: coercive control, domestic abuse, risk assessment, technology, technologyfacilitated abuse

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#### Introduction

Recent years have seen domestic abuse gain a higher profile in mainstream UK media than it has had for many years. This has come about through a confluence of factors, key amongst them being the passing into law of the Domestic Abuse Act (2021) and the upsurge of domestic abuse as a result of coronavirus lockdowns (Office for National Statistics, 2020). There is now increasing understanding that not all domestic abuse involves physical or sexual violence. Rather, abuse may also come in the form of psychological and emotional abuses, control of familial relationships, friendships, finances and freedoms and abusive behaviours such as 'gaslighting', which lead the victim to doubt their own capacity for logical thought and independent action. Such patterns of domestic abuse are termed as 'coercive control'. An understanding of coercive control is now central to UK legislation and associated guidance, having been included under the Serious Crime Act 2015 (later amended under the Domestic Abuse Act 2021) in England and Wales, the Domestic Abuse (Scotland) Act (2018) and the Domestic Abuse and Civil Proceedings Act (Northern Ireland) (2021).

All social workers need to know the signs of domestic abuse, including coercive control. However, the guidance and assessment tools currently in use reflect an increasingly outdated approach, remaining stuck in an analogue era when abuse is increasingly digital, and technologyfacilitated domestic abuse (TFDA) is rapidly becoming the norm rather than the exception. At present, guidance for social work education does not include awareness of the risks posed to service users by technology (OAA, 2019). Yet, knowledge of the dangers and possibilities afforded by technology is increasingly needed in all areas of social work. As well as understanding the implications in relation to domestic abuse, social workers must be able to keep children safe online (technology-facilitated child abuse) and safeguard adults who lack capacity but are adept at social media. Social work itself is also having to adapt, integrating new technologies to support existing modes of practice whilst protecting the human interactions which underpin social work (Baker et al., 2018). This tension was heightened by the coronavirus pandemic when requirements to work remotely at times came into conflict with relationship-based practice (Kingstone et al., 2021; Pascoe, 2021).

This article will start by discussing what TFDA is, and the numerous forms it can take. It will then move on to critique a current approach to risk assessment commonly used by social workers in cases involving domestic abuse, namely the 'Domestic Abuse, Stalking and Harassment and Honour-Based Violence' or 'DASH' risk assessment (Richards, 2009), and to consider how this assessment needs to change in order to effectively address the challenges of TFDA. It will conclude with

reflections on the onward march of technology and how the social work profession needs to acculturate to ensure that it is able to safeguard effectively against domestic abuse involving technology.

#### Methods

Four databases (ASSIA, Sociological Abstracts, Social Services Abstracts and SCIE) were searched for literature relating to TFDA and social work practice in the UK, using the search terms domestic abuse, domestic violence, technology, digital and social wor\*. To narrow down the returns, the parameters were limited to peer-reviewed papers published in the UK since 2000. All suggested papers were screened for relevance based on the title and abstract of the publication, which led to just eight papers of potential interest being identified. Upon further reading, six of these papers were discounted as they were not specific to TFDA, or focused on work with perpetrators of abuse. This left two papers: Woodlock *et al* (2020) and Tanczer *et al* (2021).

This article builds on the work of Woodlock *et al.* (2020) and Tanczer *et al.* (2021), drawing together further evidence from grey and international literature to highlight the nature, extent and dangers of TFDA.

#### TFDA in the UK

Since the turn of the millennium, there have been significant and rapidly evolving developments in the reach and capabilities of technology. In 2021, it was estimated that 94 per cent of homes had access to the Internet, rising to 99 per cent in the homes of those aged sixteen to fortyfour years (Office for National Statistics, 2021). Eighty-two per cent of over sixteen years use a smart phone; homes are also becoming increasingly connected, with 51 per cent owning a smart TV and 22 per cent a smart speaker (Ofcom, 2020). Surveillance has become normalised and embedded, with CCTV being used by both the state and home owners to monitor public and private spaces alike (Wood and Webster, 2009). With an anticipated 125 billion Internet-connected devices worldwide by 2030 (Lopez-Neira et al., 2019), we are increasingly reliant on technology to work, study, purchase goods, keep in touch with family and friends and meet new romantic partners. Yet, there remains limited discussion in the UK on how these technologies may be used by some to control, coerce or otherwise terrorise their intimate partners and children. This was highlighted in England by the killings of Arthur Labinjo-Hughes and Star Hobson, after it came to light that their parents and step-parents had incited, recorded and distributed the abuse of their children via mobile

phones, and in Arthur's case, had recorded his distress via an indoor camera (Child Safeguarding Practice Review Panel, 2022).

As Internet-connected devices become increasingly pervasive facets of everyday life, so too does the use of digital technology to facilitate or perpetrate domestic abuse. In 2014, Women's Aid (cited in Laxton, 2014) released statistics showing that 45 per cent of those responding to a survey had experienced an element of online abuse during their relationship. By 2020, Refuge was reporting that 72 per cent of those accessing their service had been subjected to abuse via technology (Christie and Wright, 2020). Shortly after this, the coronavirus pandemic and associated lockdowns hit, resulting in a wholesale increase in domestic abuse. The National Domestic Abuse Helpline reported a 65 per cent increase in calls and a 700 per cent increase in website visits between April and June 2020 (Office for National Statistics, 2020), coinciding with the first UK lockdown. Refuge (2021b) experienced a 97 per cent increase in complex cases involving TFDA and requiring specialist input between April 2020 and May 2021. By October 2021, a nationally representative survey by Refuge (2021b) found that one in six women had experienced online abuse from a current or ex-partner, equating to approximately two million women across the UK. The rise in pervasive, remotely operatable technologies has meant that, in a sense, the conditions of lockdown have become a permeant feature of domestic abuse victims' lives.

In recognition of the gravity of the harms being experienced by women, in 2023, the Home Secretary elevated violence against women and girls (VAWG) to sit alongside terrorism and serious organised crime within the strategic policing priorities. As a result, a strategic threat and risk assessment was conducted, which identified domestic abuse and tech-enabled VAWG as two of four key threats (National Police Chief's Council, 2023). Despite this, there remains no statutory or widely accepted working definition of TFDA in the UK.

TFDA is intricately linked with coercive control, with digital technologies often being used to enable courses of behaviour which uphold structural sex-based inequalities, and support men's attempts to entrap, dominate and control women (Stark, 2007; Barlow and Walklate, 2022). Technology allows domestic abuse perpetrators an enhanced level of access to information about their partner and children, including their exact location, their social networks and their daily routine (Laxton, 2014; Harris and Woodlock, 2018). This information can be used to personalise control and manipulation tactics, heightening the damage caused. Perpetrators can remotely monitor their family's whereabouts and online activity at all times, both live and retrospectively (Harris and Woodlock, 2018; Leitão, 2021), which Woodlock (2017) and later Yardley (2020) conceptualised as the opportunity to become 'omnipresent'. Technology also allows for intimate moments or acts of abuse to be recorded, stored and shared, leaving victims with the permanent threat of the abuse resurfacing (Dragiewicz *et al.*, 2018; Lever and Eckstein, 2020). In short, technology has allowed coercive control to be enacted in increasingly diverse and ever more sophisticated ways.

There are innumerable ways that those who perpetrate abuse may utilise technology, and they are condensed here into four overarching categories: surveillance and monitoring of digital activity; location tracking; manipulating a partner's reputation or personal relationships; and weaponising the smart home. Each of these will be discussed in turn in order to help social workers and others to gain insight into the myriad opportunities which technology offers for abuse and control.

#### Surveillance and monitoring of digital activity

One of the common ways perpetrators of abuse use technology to surveil their partner is through accessing their mobile phone or social media accounts (Havard and Lefevre, 2020; Woodlock et al., 2020). This enables the monitoring of day-to-day communications and activities, including calls, texts, emails and Internet search history, often so that social interactions can be controlled. For some, passwords to devices and accounts may have been shared willingly at the inception of the relationship, potentially prior to the abuse becoming recognisable. Where passwords are not shared willingly, they may be guessed (Dragiewicz et al., 2019; Leitão, 2021; Tanczer et al., 2021), or manipulation, coercion or threats may be used to pressure a partner into disclosing (Al-Alosi, 2017; Leitão, 2021). Alternatively, spyware or stalkerware may be installed onto a phone or other device to obtain passwords covertly. Such software allows a range of actions to be performed, including comprehensive monitoring of device activity, blocking functions, deleting data and accessing the camera or microphone (Yardley, 2020). Keystroke logging, which records each key the user of a device presses, is also a feature of some spyware, and allows complete access to every password, message or search conducted on the device (Al-Alosi, 2017).

In other cases, access to devices may be even simpler: where a perpetrator has bought a phone, laptop or other device, they remain the registered owner even when it is 'gifted' to their partner or child. As the buyer and owner of a device, perpetrators have easy access and ample opportunity to pair their partner or children's devices directly with their own (Yardley, 2020; Leitão, 2021), meaning that victims may never have independent or unregulated access.

#### Location tracking

As technology advances and updates, perpetrators of domestic abuse are increasingly able to monitor the location and movements of their family. One means of doing so is via the repurposing of what Chaterjee *et al.* (2018, cited in Leitão, 2021) termed as 'dual use apps'. These are apps which have been designed with a legitimate purpose, but whose functions can be co-opted for the purpose of controlling a partner or child. Common examples include the repurposing of functions such as Apple's 'Find my iPhone' or Snapchat's 'Snap Map' to locate or monitor a family member in real time. In September 2021, Apple released an update to its iOS 15 software, including to its 'Find my Friends' function (Apple, 2021a; Refuge, 2021c). This update allows perpetrators to receive notifications to their own Apple products if their partner or child's linked Apple product leaves or arrives at specific locations. This could include if they have left the house, visited family or accessed support services, and means that victims of domestic abuse can be 'locked in' virtually, without the need for a physical lock and key.

Prior to that, in April 2021, Apple launched their AirTag product, which was intended to facilitate the location of lost belongings using Bluetooth connection and the 'Find My' network (Apple, 2021b). However, where domestic abuse is present, an AirTag can easily be placed within the belongings of a partner or child and used as a tracking device. Periodically, the AirTag will alert the person it is travelling with to its presence, but only if they own an Apple product themselves. If the individual has an Android phone, alerts require the downloading of a specific detection app released by Apple in late 2021. The potential for tracking using these devices has obvious implications for those attempting to flee abuse.

AirTags are but the highest profile of a whole class of tracking devices with dual uses, many of which lack even the limited protections offered by Apple. For example, perpetrators can track their family through the installation of GPS tracking devices on a car. A high-profile case of this was the murder of Cheryl Gabriel-Hooper by her ex-husband. On the day of her murder, Cheryl and her 14-year-old daughter realised that they were being followed, via a tracking device on their vehicle. The presence of the device was significant, in that it allowed her ex-husband to easily locate Cheryl. This is not an isolated case. Todd *et al.* (2021) analysed forty-one Domestic Homicide Reviews (DHRs) for evidence of TFDA contributing to the fatal outcome. Though not all DHRs explicitly discussed technology, over half referred to cyberstalking, and 12.2 per cent to male perpetrators having hacked into their female partners' devices or accounts prior to the homicide. It is anticipated that these numbers may have been higher if full digital searches had been completed during all investigations.

#### Manipulating reputation and personal relationships

Technology can be harnessed by perpetrators of domestic abuse to control and manipulate their partner's reputation and personal relationships (Lever and Eckstein, 2020). This may include dictating when and how they can respond to messages, removing items of technology or withholding the financial means to purchase or use technology (Havard and Lefevre, 2020). It is not uncommon for perpetrators of abuse to broadcast defamatory messages about their partner, which may include attempts to 'flip the narrative', claiming that the victim is in fact the abuser. In some cases, perpetrators have presented footage of their partner appearing to act aggressively, implying that they are the abuser (Havard and Lefevre, 2020; Harris and Woodlock, 2021). What the viewer does not see is that the footage has been manipulated and is actually evidence of the victim reacting to having been abused.

To further harm their partner, perpetrators may threaten to or actually share humiliating anecdotes or intimate images of their (ex)-partner, to be seen by family, friends or work colleagues (Al-Alosi, 2017; Dragiewicz *et al.*, 2018; Douglas *et al.*, 2019; Leitão, 2021). Some of this content will constitute sexual abuse, particularly image-based sexual abuse, and some perpetrators may additionally 'dox' their partner to incite further abuse from others (Dragiewicz *et al.*, 2018). Doxxing is the publishing or sharing of private or identifying information without the consent of the person it concerns, with the intention of shaming them or encouraging others to perpetrate violence or abuse (Leitão, 2021). The public nature of this form of abuse means that those subjected to it must deal not only with the psychological trauma of the abuse, but also with the shame and fear that come from having private images or information shared online (Lever and Eckstein, 2020).

#### Weaponising the smart home

An emerging, lesser-known form of TFDA involves the use of the 'smart home', characterised by interconnected and Internet-connected devices. Most prominent perhaps are Amazon's smart speakers and Ring doorbell, but connected devices which can control household functions remotely via apps include everything from TVs to lightbulbs to white goods and even 'wearables' like smart watches and fitness trackers. The smart home is sold on the promise of increased comfort and convenience, achieved by empowering the user with advanced controls (Goulden, 2019, 2021). Yet, in the context of domestic abuse, the smart home erodes victims' privacy and enables perpetrators' use of surveillance and control tactics.

Utilising shared and remote access, users are able to listen into and record conversations, access live video streams of household movements and adjust heating or lighting to leave their family hot, cold or in the dark (Tanczer *et al.*, 2018, 2021; Lopez-Neira *et al.*, 2019). Those being victimised may not be aware of the exact nature or full scale of the abuse, and perpetrators may be able to gaslight their partner into believing that they are experiencing mental health concerns such as paranoia (Dragiewicz *et al.*, 2018, 2019; Leitão, 2021; Tanczer *et al.*, 2021). Where partners are aware of the technology, perpetrators may be successful in exaggerating their own technical ability or convincing their partner that devices have more sophisticated surveillance features than actually exist (Christie and Wright, 2020; Tanczer *et al.*, 2021), particularly if they are more confident or competent with technology. This is especially likely to occur where women are being subjected to abuse by male partners, with women generally experiencing lower levels of technological confidence compared to men (Oudshoorn *et al.*, 2004; Douglas *et al.*, 2019).

Upon separating, there are additional and distinct challenges presented by the smart home, especially when those subjected to the abuse attempt to 'digitally decouple' (Tanczer *et al.*, 2021). Personal and home devices are connected to and communicate with each other in intricate ways, and there may be complexities around who owns devices, controls access and can delete other users (Goulden, 2019, 2021; Lopez-Neira *et al.*, 2019). This new level of interpersonal connectedness adds to the potential for post-separation abuse, raising new challenges for social work. As technology advances, excluding the abuser from the family home or relocating women, children and families to new/secret locations may no longer be an effective safeguarding practice without additional skilled technological support.

Alongside the implications for those being abused, developments within the smart home are expected to become a key concern for the safety of social workers, particularly in regard to the increasing uptake of smart doorbells (UKTech, 2020), like Amazon's Ring. These smart doorbells send live notifications to the owner's mobile phone and allow real-time footage to be viewed whenever movement is detected (Ring, 2022). This technology poses a significant risk to both social workers and service users. With a smart doorbell installed, it is no longer possible for social workers to visit a home without an abuser having a record of the visit. Moreover, where social workers are making home visits whilst a specific member of the household is believed to be absent, that individual now has the power to remotely monitor the home and to potentially return whilst the social worker is present.

#### Understanding intersecting vulnerabilities

Whilst it is useful for social workers to have some understanding of the various ways in which technology can be used to control and abuse, it is also important that they recognise how the interplay between TFDA and wider social structures results in different levels of risk for different groups. Taking an intersectional approach (Crenshaw, 1991) enables

consideration of how discriminations and exclusions based on ethnicity, nationality, gender, age and disability may converge to produce specific risks of abuse. People with certain characteristics are more likely to be victimised or to experience TFDA in particular ways as a result of intersecting vulnerabilities, disadvantage or marginalisation.

Domestic abuse is known to be a gendered issue, with men most likely to perpetrate abuse and women more likely to be victimised (Dobash *et al.*, 1992; Office for National Statistics, 2020). Patterns of coercive control are often characterised by men's attempts to monitor and control a female partner's performance of gender, underpinned by an alignment with traditional gender roles and beliefs around male dominance (Stark, 2007; Barlow and Walklate, 2022). Technological confidence and competency are also largely gendered, with men being more likely to purchase, install and manage technology in mixed-sex households (Oudshoorn *et al.*, 2004; Douglas *et al.*, 2019). This creates a multi-layered, gendered dynamic within which TFDA can occur.

Although women as a group are more at risk from TFDA than men, some groups of women are at heightened risk. It is therefore important to highlight the particular vulnerabilities for women with insecure immigration status, women living within 'honour'-based communities, women with learning disabilities and children (particularly girls) and young people.

## Women who have insecure immigration status or are at risk of the so-called 'honour violence'

Women with insecure immigration status are particularly vulnerable to domestic abuse, including TFDA. Abusive partners are able to capitalise on their insecure status to force compliance, playing on the very real threat of deportation if women leave their relationship within five years of arriving in the UK whilst unable to 'prove' that they have been subjected to domestic abuse (Rights of Women, 2017). Perpetrators of abuse who are the immigration sponsors of their partner may deliberately fail to renew visas (Henry et al., 2021), or delete online documents (Dragiewicz et al., 2019), to trap women in relationships. To increase social isolation, perpetrators may physically or financially withhold access to technology, preventing their partner from contacting family in their country of origin or forming friendships in their new community (Woodlock et al., 2020; Henry et al., 2021). In communities where women are expected to conform to gendered standards to uphold family 'honour', technology may also be utilised to (threaten to) shame a partner who wishes to leave their relationship, for example, through distributing content deemed to be sexualised or intimate (Douglas et al., 2019). This renders the victim at heightened risk of being subjected to so-called

'honour violence' (Gill, 2008; Henry *et al.*, 2021), and increases their need to become untraceable upon ending the relationship.

#### Women with learning disabilities

Whilst there is limited research in the UK context, research from Australia has shown that women with learning disabilities experience TFDA in similar ways to women without, including receiving abusive messages, being pressured to send intimate images or being financially controlled (Harris and Woodlock, 2021). The same research also found that women with learning disabilities experience additional specific and unique forms of TFDA, including abusive content which refers to their disability, and the co-option of assistive devices, such as placing trackers on mobility aids, hiding assistive devices or withholding support to access online resources. The partners of women with learning disabilities often will not have a learning disability themselves (McCarthy, 2018), exacerbating power inequalities and further trapping them within the relationship.

Women with learning disabilities may be especially reluctant to disclose TFDA, fearing that their access to digital devices or online spaces may be restricted or removed. This is particularly isolating if friendships are maintained online due to a lack of confidence accessing physical community spaces independently (Woodlock *et al*, 2020; Harris and Woodlock, 2021). Clear and concise information about technology and online safety should be provided to women at an appropriate level for them, to facilitate informed choices about their engagement with online spaces and to build confidence in disclosing abuse (McCarthy, 2016). Support to access technology safely must be maintained after a relationship has ended (Harris and Woodlock, 2021), to ensure that women are not forced to reconnect with an abusive partner to find technical help.

#### Children and young people

Age is also a known risk factor in the perpetration and experiencing of online abuse. Whilst TFDA can be experienced at all life stages, young people are at increased risk due to higher rates of integration of technology into their daily lives (Willoughby, 2019; Nikupeteri *et al.*, 2021). Despite this, there has been little research on interpersonal abuse between young people in relationships in comparison to other forms of online abuse (Barter, 2009). Though the legal definition of domestic abuse in the UK explicitly refers to those aged over sixteen years (Domestic Abuse Act 2021, Section 1), there is evidence that those under sixteen also experience coercive and controlling relationships, with online and

digital elements (Davies, 2019). Digital coercive control can be hard to spot within young people's relationships, and very high levels of contact may be viewed as normal (Dragiewicz *et al.*, 2018). It is therefore of particular importance for social workers to establish the meaning and impact of online contact between young people, to recognise when abuse may be present.

Children and young people can additionally experience TFDA from a parent, often but not always fathers, who may either directly abuse the child or utilise children to perpetrate abuse against their mother. Nikupeteri et al. (2021) identified three core themes in father-to-child TFDA. The first involved making direct threats against the children or their non-abusive parent, including to destroy property, harm pets or harm or kill the children or their mother. The second was intrusive and obsessive parenting of the children, such as using parental controls or tracking apps in a disproportionate way to monitor and control. The third was using technology to insult or discredit the mother, for example, sending abusive content to the child to relay to their mother or undermining the mother's parenting. As with other forms of emotional, psychological and sexual abuse (Dye, 2018), being exposed to this type of content and family dynamic during their formative years can have enduring effects on young people's identity formation, emotional regulation and ability to form and maintain healthy interpersonal relationships. This renders children victims of abuse even where the primary target is the mother. As such, children are now included as independent victims of domestic abuse under Section 3 of the Domestic Abuse Act (2021).

#### Limits of the current DASH risk assessment tool

Social workers, police and other professionals in the UK routinely use the 'Domestic Abuse, Stalking and Harassment and Honour-Based Violence' or 'DASH' risk assessment tool to assess and grade risk in cases of domestic abuse (Richards, 2009). By combining service user answers to a series of questions with professional judgement, those completing the DASH assessment categorize cases as 'standard', 'medium' or 'high' risk, which is then used to decide the level of input and support required. Whilst there are recognised issues with the application of a standardised risk assessment tool (Barlow and Walklate, 2022; Myhill *et al.*, 2023), the use of DASH to assess risk is generally considered good practice.

However, whilst it may be appropriate for gathering evidence and assessing some risk factors, in its current form, the DASH tool is insufficiently developed for non-specialist users to assess TFDA (Tanczer *et al.*, 2021) and coercive control (Wire and Myhill, 2018; College of Policing, 2022). DASH includes only a single technology-specific question

(Richards, 2009, question 8), with the supplementary questions on stalking making no explicit reference to digital technologies (Richards, 2009, Additional Stalking and Harassment Risk Questions). DASH's lack of prompts to enquire about technology means those experiencing domestic abuse are reliant on social workers having sufficient independent knowledge of TFDA. The 'yes/no' format of the DASH can result in an incident-based approach to assessing risk, leading to cases of coercive control (including digitally-facilitated coercive control) being misgraded into lower risk categories than is merited (Wire and Myhill, 2018; College of Policing, 2022). Where technology and its capacity to facilitate coercive control and stalking are not properly understood, these risks may not be fully assessed.

The limitations of the DASH have been formally recognised by the Inspectorate of Constabulary and Fire and Rescue Services, and the College of Policing, with the development of a novel risk assessment, the Domestic Abuse Risk Assessment (DARA) (College of Policing, 2022). However, whilst DARA has been positively evaluated for use by non-specialist front line professionals, at present it is only recommended for police response officers.

Existing studies suggest that social workers and other professionals lack confidence assessing TFDA (Tanczer *et al.*, 2021; Straw and Tanczer, 2023), particularly when working with young people who have grown up with technology and who may be considered 'digital natives' (Willoughby, 2019). This lack of confidence means that, at present, those being abused are regularly advised to remove themselves from technology and online spaces (Yardley, 2020), which is an inappropriate response. Technology is so embedded within society that such advice serves to further restrict and isolate women and children (Woodlock *et al*, 2020; Nikupeteri *et al.*, 2021; Harris and Woodlock, 2021), potentially also damaging access to education or employment (Yardley, 2020), which can have significant financial implications.

# Assessing the role of technology in cases of domestic abuse

Despite the lack of formal tools to assess the presence of TFDA, there are topics which social workers could and should incorporate into conversations with service users as an extension to the standard DASH. These recommendations are influenced by the work of Straw and Tanczer within clinical settings (2023), as well as advocacy sector resources from Cornell's Clinic to End Tech Abuse (2020) and Refuge's Tech Abuse Team (2021c).

First, it is important to establish which technologies service users and their children own or have access to. As well as mobile phones, laptops and tablets, consideration should be given to 'smart home' devices. This may include smart TVs, smart speakers, internal and external cameras including pet cameras and smart baby monitors, smart doorbells and sports watches. Each of these technologies could be used to monitor, coerce or control women, to record social worker visits or to trace women to a new address. If a woman has relocated, apps installed on devices may also become a source of danger: a fast-food app for which both partners share the login details can enable an abuser to track their expartner to a new address (Refuge, 2021c). Where social workers need support with screening for technology, they should refer to Refuge's interactive home tech tool (Refuge, 2021a).

Secondly, who has access to each Internet-enabled device should be ascertained. Items which are gifted may have been tampered with to enable monitoring of activity, or surveillance of the user's whereabouts. Even if items were not gifted, consideration should be given to determine whether the service user's partner has access to the passwords for the devices, could guess the passwords to the devices or whether they may have had the opportunity to pair the devices with their own (Yardley, 2020; Leitão, 2021). Service users should also be asked if their partner has access to their phone records or bank statements, as this can alert them to call or spending patterns which suggest they are seeking support or planning to leave (Snook and Safelives, 2017). Even after a woman has left, a bank statement sent to the perpetrator's address may disclose her new whereabouts via spending locations.

Thirdly, social workers should facilitate discussion around any behaviours or incidents which may suggest that the service user's devices have been compromised, and/or that their (ex-)partner is digitally monitoring or tracking them. This could include asking whether the service user has ever felt their partner knew information which they did not remember disclosing, or whether their partner appears to have knowledge of conversations to which they were not privy. Women may also have concerns around their partner unexpectedly knowing their movements, or turning up at locations without invitation. If social workers are concerned that women's or children's devices have been compromised, Cornell's Clinic to End Tech Abuse (2020) and Refuge's Tech Abuse Team (2021c) have produced a series of checklists and guides to securing devices and accounts.

Where TFDA is believed to be present, digitally disentangling women and children from the perpetrator must be carefully managed. Where women and children are not fleeing, full and immediate removal of the perpetrator's technological control is likely to result in an escalation of risk (Woodlock, 2017, Woodlock *et al*, 2020; Dragiewicz *et al.*, 2019; Leitão, 2021). For the same reason, when women and their children do flee, they will likely need support to fully remove digital links to the perpetrator in order to ensure their safety.

When working with families in the digital age, social workers must also be alert to the heightened opportunity for perpetrators of abuse to revise or restrict their partner's communications with others, and to 'flip the narrative' around who is being abused by whom (Havard and Lefevre, 2020; Harris and Woodlock, 2021). Where their access to technology has been controlled or removed, victims may present as inconsistent engagers. This could have serious ramifications in many areas of social work, especially in relation to child contact (McCarthy, 2018). As discussed earlier, content supposedly evidencing abuse may also be fabricated by the perpetrator to incriminate the victim, which could have significant implications in relation to safeguarding decisions. Social workers should remain alert to the fact that evidence presented to them may have been manipulated by the perpetrator, and that communications which appear to be from a service user may have been sent or edited by an abusive partner. Communications sent by social workers are also at risk of being intercepted if the woman's partner has access to their mobile phone or associated accounts, potentially putting both the woman and the social worker at risk (Slupska and Brown, 2022).

#### Conclusion

Over time, technologies will continue to develop, diversify and become embedded in our day-to-day lives. So too will TFDA become ever more sophisticated, enabling increasingly comprehensive opportunities to monitor, coerce and control family members. Technology is swiftly becoming an area of key concern for social workers, both in their ability to safeguard adults and children, and to remain safe themselves during their interactions with those impacted by TFDA.

Social workers require up-to-date training and support to effectively and safely work with those impacted by TFDA. The workforce must be able to recognise and assess the presence of TFDA, and provide or signpost service users to accurate, user-friendly resources on how to digitally disentangle from an abuser. This must be done carefully and with appropriate support and safeguards in place, as immediately and fully removing all contact with an abuser can result in escalation of abuse and violence, due to their sudden loss of control (Woodlock, 2017, Woodlock et al. 2020; Dragiewicz et al., 2019; Leitão, 2021). As such, risk assessment tools must be made fit for purpose, and the 'DASH' (Richards, 2009) risk assessment needs updating to reflect the developments in technology since its inception. This said, technology continues to rapidly develop and diversify, and it will not be possible for the majority of social workers to keep pace with this. Whilst it is important for the whole workforce to be able to recognise the presence of TFDA, local authorities should consider creating teams with specialist knowledge in technology, who have the skills and the knowledge to advise in cases of TFDA, as well as wider child protection and adult safeguarding issues.

This is just one area of practice where social workers need to understand the dangers posed by technology. As each new generation becomes more technologically competent than the last, TFDA will continue to evolve. TFDA must be understood and addressed by the workforce if future risks are to be minimised. Yet, despite the many dangers and challenges involved, technology is not all bad. Used carefully, technology has the potential to enhance social work practice and enrich individual lives, offering flexible support options and increasing social contact. The challenge for social workers is to find the right balance between the risks and benefits of new technologies.

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#### References

- Al-Alosi, H. (2017) 'Cyber-violence: Digital abuse in the context of domestic violence', University of New South Wales Law Journal, 40(4), pp. 1573–603.
- Apple (2021a) New Features Available with iOS 15 [Online], California, Apple.
- Apple (2021b) Air Tag: Lose Your Knack for Losing Things [Online], California, Apple.
- Baker, S., Warburton, J., Hodgkin, S. and Pascal, J. (2018) 'The new informational paradigm: Developing practice-led approaches to the use of mobile ICT in social work', *The British Journal of Social Work*, **48**(6), pp. 1791–809.
- Barlow, C. and Walklate, S. (2022) *Coercive Control*, Oxon and New York, Routledge.
- Barter, C. (2009) 'In the name of love: Partner abuse and violence in teenage relationships', *British Journal of Social Work*, **39**(2), pp. 211–33.
- Child Safeguarding Practice Review Panel (2022) National Review into the Murders of Arthur Labinjo-Hughes and Start Hobson [Online], London, GOV.UK.
- Christie, L. and Wright, S. (2020) *Technology and Domestic Abuse* [Online], London, UK Parliament.
- Clinic to End Tech Abuse (2020) Resources: Step-by-Step How to Guides [Online], New York, Cornell University.
- College of Policing (2022) Domestic Abuse Risk Assessment (DARA): Information for Stakeholders [Online], Coventry, College of Policing Limited.
- Crenshaw, K. (1991) 'Mapping the margins: Intersectionality, identity politics, and violence against women of color', *Stanford Law Review*, **43**(6), pp. 1241–99.
- Davies, C. T. (2019) 'This is abuse?: Young women's perspectives of what's 'OK' and 'Not OK' in their intimate relationships', *Journal of Family Violence*, **34**(5), pp. 479–91.

- Dobash, R. P., Dobash, R. E., Wilson, M. and Daly, M. (1992) 'The myth of sexual symmetry in marital violence', *Social Problems*, **39**(1), pp. 71–91.
- Domestic Abuse (Scotland) Act 2018, asp.5. Available at: www.legislation.gov.uk/asp/ 2018/5/contents/enacted (Accessed April 2022).
- Domestic Abuse Act 2021, c.17. Available at: www.legislation.gov.uk/ukpga/2021/17/ contents/enacted (Accessed April 2022).
- Domestic Abuse and Civil Proceeding Act (Northern Ireland) 2021, c.2. Available at: www.legislation.gov.uk/nia/2021/2/enacted (Accessed April 2022).
- Douglas, H., Harris, B. and Dragiewicz, M. (2019) 'Technology-facilitated domestic and family violence: Women's experiences', *The British Journal of Criminology*, 59(3), pp. 551–70.
- Dragiewicz, M., Burgess, J., Matamoros-Fernández, A., Salter, M., Suzor, N., Woodlock, D. and Harris, B. (2018) 'Technology facilitated coercive control: Domestic violence and the competing roles of digital media platforms', *Feminist Media Studies*, 18(4), pp. 609–25.
- Dragiewicz, M., Harris, B., Woodlock, D., Salter, M., Easton, H., Lynch, A., Campbell, H., Leach, J. and Milne, L. (2019) *Domestic Violence and Communication Technology: Survivor Experiences of Intrusion, Surveillance, and Identity Crime*, Sydney, Australian Communications Consumer Action Network.
- Dye, H. (2018) 'The impact and long-term effects of childhood trauma', *Journal of Human Behavior in the Social Environment*, **28**(3), pp. 381–92.
- Gill, A. (2008) "Crimes of Honour' and violence against women in the UK', *International Journal of Comparative and Applied Criminal Justice*, **32**(2), pp. 243–63.
- Goulden, M. (2019) "Delete the family': Platform families and the colonisation of the smart home', *Information, Communication and Society*, **24**(7), pp. 903–20.
- Goulden, M. (2021) 'Folding and friction: The internet of things and everyday life', In Rohlinger, D.A. and Sobieraj, S. (eds.), *Oxford Handbook of Sociology and Digital Media*, Oxford, Oxford University Press.
- Harris, B. and Woodlock, D. (2018) 'Digital coercive control: Insights from two landmark domestic violence studies', *The British Journal of Criminology*, **59**(3), pp. 530–50.
- Harris, B. and Woodlock, D. (2021) 'For my Safety' Experiences of Technology-Facilitated Abuse among Women with Intellectual Disability or Cognitive Disability [Online]. Melbourne: E-Safety Commissioner.
- Havard, T. E. and Lefevre, M. (2020) 'Beyond the power and control wheel: How abusive men manipulate mobile phone technologies to facilitate coercive control', *Journal of Gender-Based Violence*, **4**(2), pp. 223–39.
- Henry, N., Vasil, S., Flynn, A., Kellard, K. and Mortreux, C. (2021) 'Technology-facilitated domestic violence against immigrant and refugee women: A qualitative study', *Journal of Interpersonal Violence*, **37**(13–14), pp. NP12634–60.
- Kingstone, T., Campbell, P., Andras, A., Nixon, K., Mallen, C. and Dikomitis, L and the Q-COVID-19 Group (2021) 'Exploring the impact of the first wave of COVID-19 on social work practice: A qualitative study in England, UK', *The British Journal of Social Work*, **52**(4), pp. 2043–62. Advance Access published, https://doi.org/10.1093/bjsw/bcab166.
- Laxton (2014) Virtual World, Real Fear [Online], Bristol, Women's Aid.

- Leitão, R. (2021) 'Technology-facilitated intimate partner abuse: A qualitative analysis of data from online domestic abuse forums', *Human–Computer Interaction*, **36**(3), pp. 203–42.
- Lever, K. and Eckstein, J. (2020) "I never did those things they said!": Image, coercive control, and intrusion from former partners' technology-mediated abuse', *Iowa Journal of Communication*, **52**(1), pp. 49–67.
- Lopez-Neira, I., Patel, T., Parkin, S., Danezis, G. and Tanczer, L. (2019) "Internet of Things': How Abuse is Getting Smarter', *Safe – the Domestic Abuse Quarterly*, 63, pp. 22–26.
- McCarthy, M. (2016) 'What are the support needs of women with learning disabilities who have been abused?', *Tizard Learning Disability Review*, **21**(1), pp. 39–42.
- McCarthy, M. (2018) "All I wanted was a happy life": The struggles of women with learning disabilities to raise their children whilst also experiencing domestic violence', *Journal of Gender-Based Violence*, **3**(1), pp. 101–17.
- Myhill, A., Hohl, K. and Johnson, K. (2023) 'The 'officer effect' in risk assessment for domestic abuse: Fundings from a mixed methods study in England and Wales', *European Journal of Criminology*, 20(3), pp. 856–77.
- National Police Chief's Council (2023) Strategic Threat and Risk Assessment of Violence against Women and Girls [online] London, Vulnerability Knowledge and Practice Programme.
- Nikupeteri, A., Katz, E. and Laitinen, M. (2021) 'Coercive control and technology-facilitated parental stalking in children's and young people's lives', *Journal of Gender-Based Violence*, **5**(3), pp. 395–412.
- Ofcom (2020) Online Nation 2020 Report [Online], London, Ofcom.
- Office for National Statistics (2020) Domestic Abuse during the Coronavirus (COVID-19) Pandemic, England and Wales: November 2020 [Online, London, Office for National Statistics.
- Office for National Statistics (2021) Internet Users [Online], London, Office for National Statistics.
- Oudshoorn, N., Rommes, E. and Stienstra, M. (2004) 'Configuring the user as everybody: Gender and design cultures in information and communication technologies', *Science, Technology and Human Values*, **29**(1), pp. 30–63.
- Pascoe, K. (2021) 'Remote service delivery during the COVID-19 pandemic: Questioning the impact of technology on relationship-based social work practice', *British Journal of Social Work*, Advance Access published, https://doi.org/10.1093/ bjsw/bcab242.
- QAA (2019) Subject Benchmark Statement: Social Work [Online], Gloucester, QAA.

Refuge (2021a) Refuge Launches Tech Safety Website [Online], London, Refuge.

- Refuge (2021b) Unsocial Spaces: Make Online Spaces Safer for Women and Girls [Online], London, Refuge.
- Refuge (2021c) Information and Support on Tech Abuse [Online], London, Refuge.
- Richards, L. (2009) Domestic Abuse, Stalking and Harassment and Honour Based Violence Risk Identification and Assessment and Management Model [Online], London, Dash Risk Model.
- Rights of Women (2017) Domestic Violence and Immigration Law: The "Domestic Violence Rule" [Online], London, Rights of Women.

Ring (2022) There is a Ring for Every Home [Online], Santa Monica, Ring.

Sexual Offences Act 2003, c.42. Available at: www.legislation.gov.uk/ukpga/2003/42/ contents (Accessed April 2022).

- Slupska, J. and Brown, M. (2022) 'Aiding intimate violence survivors in lockdown: Lessons about digital security in the Covid-19 pandemic', CHI EA '22: Extended Abstracts of the 2022 CHI Conference on Human Factors in Computing Systems, New Orleans, 30th April to 5th May, New Orleans, USA.
- Snook, C. and Safelives. (2017) *Tech vs Abuse: Research Findings* [Online], Bristol, SafeLives.
- Stark, E. (2007) Coercive Control: The Entrapment of Women in Personal Life, New York, Oxford University Press.
- Straw, I. and Tanczer, L. (2023) 'Safeguarding patients from technology-facilitated abuse in clinical settings: A narrative review', *PLOS Digital Health*, 2(1), pp. e0000089.
- Tanczer, L., Lopez Neira, I., Parkin, S., Patel, T., and and Danezis, G. (2018) Gender and IoT Research Report; the Rise of the Internet of Things and Implications for Technology-Facilitated Abuse [Online], London, UCL.
- Tanczer, L., López-Neira, I. and Parkin, S. (2021) "I feel like we're really behind the game': perspectives of the United Kingdom's intimate partner violence support sector on the rise of technology-facilitated abuse', *Journal of Gender-Based Violence*, 5(3), pp. 431–50.
- Todd, C., Bryce, J. and Franqueira, V. (2021) 'Technology, cyberstalking and domestic homicide: Informing prevention and response strategies', *Policing and Society*, **31**(1), pp. 82–99.
- UKTech (2020) Strategy Analytics: One in Four Smart Homes Have a Video Doorbell [Online]. London: UKTech.
- Willoughby, M. (2019) 'A review of the risks associated with children and young people's social media use and the implications for social work practice', *Journal of Social Work Practice*, 33(2), pp. 127–40.
- Wire, J. and Myhill, A. (2018) Piloting a New Approach to Domestic Abuse Frontline Risk Assessment: evaluation Report [Online], London, College of Policing Limited.
- Wood, D. and Webster, C. (2009) 'Living in surveillance societies: The normalisation of surveillance in Europe and the threat of Britain's bad example', *Journal of Contemporary European Research*, 5(2), pp. 259–73.
- Woodlock, D. (2017) 'The abuse of technology in domestic violence and stalking', Violence against Women, 23(5), pp. 584–602.
- Woodlock, D., McKenzie, M., Western, D. and Harris, B. (2020) 'Technology as a weapon in domestic violence: responding to digital coercive control', *Australian Social Work*, **73**(3), pp. 368–80.
- Yardley, E. (2020) 'Technology-facilitated domestic abuse in political economy: A new theoretical framework', *Violence against Women*, **27**(10), pp. 1479–98.