ORIGINAL ARTICLE



Policing Technology-Facilitated Domestic Abuse (TFDA): Views of Service Providers in Australia and the United Kingdom

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Abstract

Purpose Technology-facilitated domestic abuse (TFDA) is a prevalent form of domestic abuse. While police are recognized as critical first responders to intimate partner violence, there is limited research about what the challenges to policing TFDA are perceived to be and how they might be addressed. This article speaks to this issue.

Methods Between April 2020 and June 2022, n=196 Australian and n=256 United Kingdom representatives of services engaged with domestic abuse victim-survivors participated in an online survey about TFDA. Survey components asked respondents to report on challenges to policing TFDA. The authors analyzed these comments.

Results Key themes identified from the survey responses regarding challenges to policing TFDA include that participants held perceptions that (a) police do not recognize TFDA as an aspect of coercive control and thus do not recognize its seriousness, (b) police receive inadequate training about TFDA, (c) police have insufficient time and personnel to tackle TFDA and (d) evidence collection is an obstacle to policing TFDA.

Conclusions The study points to a need to address the perceived concerns associated with policing TFDA to effectively respond to domestic abuse in the digital age and ensure domestic abuse perpetrators who misuse emerging technologies are held accountable.

Keywords Technology-facilitated abuse · Tech abuse · Domestic violence · Domestic abuse · Police · Coercive control

Introduction

Police play an important role in responding to domestic abuse. In Australia, police apply for over 75% of domestic abuse protection orders on behalf of the person subjected to domestic abuse (Queensland Courts, 2023). An increasingly prevalent aspect of domestic abuse is technology-facilitated domestic abuse (TFDA). TFDA is a broad term that encompasses many behaviors that utilize mobile phones and other

digital technologies to harass, threaten, control, and monitor a victim-survivor (Douglas et al., 2019). Digital systems may also be used to enact other forms of abuse. For instance, financial abuse can be performed using online banking apps or be exploited to aid in-person stalking (Harris & Woodlock, 2022). Increasingly domestic abuse is understood as coercive control, which Stark defines as 'a pattern of sexual mastery that includes tactics to isolate, degrade, exploit, and control...' (Stark, 2012, p. 201). Through this lens, TFDA is understood as one of the numerous strategies used by abusers as a tactic of coercive control.

TFDA can be an aspect of domestic abuse flagged when reporting a crime, and several criminal offenses could be investigated and charged in circumstances where TFDA is suspected. Relevant offenses may include the criminal offense of contravention of a civil protection order, unauthorized access to a computer, and threats (Douglas & Burdon, 2018; Stevens et al., 2021). In some jurisdictions, intimidation, harassment, image-based abuse, coercive control, and abusive behavior offenses exist and could encompass TFDA (Wangmann, 2022). Yet, despite the important

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role that police play in responding to allegations of domestic abuse, there is limited research about the issues associated with policing TFDA.

In this article, we report on a component of an online survey undertaken in Australia and the United Kingdom (UK) that explored the understanding, experience, and responses to TFDA. We consider the Australian and UK support service sectors' perceptions of policing TFDA and the challenges that law enforcement face regarding this evolving phenomenon. We begin with a review of the literature before setting out the context and methods of the study. We then discuss the study findings and conclude with recommendations for further consideration.

Literature Review

TFDA is not uncommon. In a survey of Australian adults, Powell et al. (2022) report that of 4,288 participants – around 19% (n=852) – had encountered TFDA. In the UK, the domestic abuse charity Refuge, together with the cybersecurity company Avast (Refuge & Avast, 2021) surveyed 2000 British women. In the Refuge and Avast study, 41% of all participants stated that a partner or family member knows the password to their personal devices, with 28% of women saying that they did not give this password willingly (Refuge & Avast, 2021).

TFDA can be an invasive and inescapable form of abuse, causing high levels of emotional and psychological harm (Fiolet et al., 2021). Victim-survivors express feeling constantly surveilled and their abuser being omnipresent (Harris, 2018; Yardley, 2021). Digital systems further aid dynamics of gaslighting (Slupska & Tanczer, 2021), such as when perpetrators use a device's functionality (e.g., remote changing of temperature) to make a victim-survivor feel as if they are losing, not only their sanity, but basic control over their home.

While police are key first responders to domestic abuse, studies have begun to uncover shortcomings in police responses to TFDA (Flynn et al., 2023; Tanczer et al., 2021; Woodlock et al., 2022). First, a common concern raised by victim-survivors is that police tend to over-focus on physical forms of abuse and are likely to dismiss or trivialize non-physical abuse (Brown et al., 2021; Harris & Woodlock, 2022; Powell & Henry, 2018; Woodlock et al., 2022). For example, victim-survivors reported to Harris and Woodlock that text messages were disregarded as 'not real' violence and that 'police are a bit old-school in their way of thinking you're not hurt unless it's visible' (2022, p. 144). Such instances illustrate Stark's claim that the level of observable harm determines how police react to domestic abuse (2012).

Second, police are frequently accused of neglecting TFDA in risk assessments and safety planning processes (Todd et al., 2021; Woodlock et al., 2020). Spivak and colleagues (2021) and Tanczer and colleagues (2021) point to the need for police to focus on abuse patterns rather than discrete incidents when conducting risk assessments in the context of domestic abuse. They highlight the value of structured risk assessment tools that oblige police to ask specific questions about TFDA behaviors (Spivak et al., 2021; Tanczer et al., 2021). In the UK, these critiques have recently led to an update of the Domestic Abuse, Stalking, Harassment and Honour Based Violence Assessment (DASH) tool, which is to be replaced by the Domestic Abuse Risk Assessment (DARA) (College of Policing, 2022). DARA, developed for police, explicitly accounts for phone, email, and social media monitoring (College of Policing, 2022). Notably, partner service agencies are expected to continue to use the DASH (College of Policing, 2022, p.6).

Third, service providers and victim-survivors report that police often place the burden on victim-survivors to manage abusive behavior, especially those facilitated through technology. Studies have reported that police frequently suggest victim-survivors are 'over-reacting' (Dunn, 2021, p. 27) and recommend they disconnect from social media platforms, obtain new devices, or disengage from technology (Dragiewicz et al., 2019; Flynn et al., 2023; Freed et al., 2017; Woodlock et al., 2020, 2022). Rather than requiring the abusive partner to be accountable for their actions, these responses place the responsibility on the victim-survivor to adjust their usage, which can exacerbate their isolation and escalate abuse (Douglas et al., 2019).

Fourth, researchers point to a lack of clarity in existing legislation, gaps in legislative responses and cross-jurisdictional issues with law enforcement (such as messages being uploaded in one jurisdiction to victimize a person in another jurisdiction; Powell and Henry, 2018). For instance, most proposed legislation – such as the *Online Safety Bill UK* (2023) in the UK – focuses on regulating already widely used technologies and platforms. This reactive approach has been argued to be shortsighted as it does not foresee challenges caused by the amplification of emerging technologies, including the so-called Internet of Things, Artificial Intelligence, or robotics (Tanczer et al., 2018).

Yardley (2021) argues that TFDA reinforces misogynistic social values that underpin domestic abuse. It is perhaps unsurprising that the literature on policing domestic abuse, more generally, has identified similar concerns to those emerging in specific discussions about TFDA. However, while TFDA is an important aspect of domestic abuse, there is limited research exploring police responses to this harm.



Context and Methodology

Context

The online surveys reported on in this article took place in Australia and the UK. We were guided by a conceptual lens grounded in Stark's (2007) understanding of domestic abuse as coercive control. One of the many similarities in the response to domestic abuse in Australia and the UK, which makes the comparison useful, includes an analogous understanding and conceptualization of coercive control and the role of TFDA. Within this approach, there are organizational efforts by government and charitable bodies in both countries to educate and advise on TFDA and legislative endeavors to respond to TFDA including introducing offenses such as image-based abuse, online safety, and stalking in legislative responses to domestic abuse (Douglas & Burdon, 2018; Powell et al., 2022). Similarly, concerns have been raised in both countries about the police response to domestic abuse more generally (Richards, 2022; Baroness Casey Review, 2023).

Survey

We deployed our online survey using Opinio, a web-based survey tool operated by University College London. The authors constructed the survey . The survey contained 28 items, including consent to participation, multiple choice, yes/no, and open-ended questions. The items focused on participants' background/demographics, the frequency, nature, and response to and challenges with TFDA and the impact of COVID-19. The items were informed by a qualitative interview outline deployed previously and altered for the online context (Tanczer et al., 2021). Participants could elaborate on their responses and provide written details on any items for which they wanted to offer additional information. The questionnaire completion took approximately 5–10 min, depending on the level of detail respondents were willing to share.

Data Collection

Between April 2020 and June 2022, representatives of services engaged with domestic abuse victim-survivors were invited to participate in the online survey. We kept the questionnaire open for this extended period to increase the response rate, counteract interruptions faced by the COVID-19 pandemic, and adjust for any survey fatigue/saturation that was caused by the high level of polls and online forms sent out during the height of the pandemic. Before participants could respond to the items, they were provided with detailed information about the survey. An embedded

information sheet contained details about the purpose of the study, background on the research team, as well as the processing and handling of the data. Confidentiality, as well as the option to withdraw from the study, were guaranteed.

Participants and Sampling

A self-selected sample of n = 452 participants (n = 196 Australia; n = 256 UK) were surveyed for this study. Participants identified as working in services that engaged with domestic abuse victim-survivors. This included the domestic abuse/ stalking/sexual assault, legal, health, housing, policing, probation, child protection, education, disability, and community sector. The majority of participants who identified their gender were female, including trans-gender female (n = 165(84.2%) Australia; n=208 (81.3%) UK). More than half (n=179 (58.5%)) of the UK respondents said they worked in a 'domestic violence/stalking' focused workplace, compared with just over one quarter (n=66 (29.6%)) of Australian respondents. Only nine participants identified that they worked as police (n=2 Australia; n=7 UK). Further details about the gender and work focus of the respondents are recorded in Table 1.

The researchers shared the survey through their professional contacts, who were asked to distribute the call for participants through their networks. Team members also placed advertisements on social media outlets and in newsletters. Participation in the study was voluntary and no financial or other form of compensation was offered to respondents. Ethics approval was obtained from the respective university boards and committees before recruitment began.

Data Analysis

Data analysis started in July 2022 and ended in January 2023. The analysis was conducted in several stages. First, the authors read the responses multiple times to facilitate immersion. Second, the authors applied a systematic, thematic qualitative analysis to extract information from participants' written, narrative responses to all open-ended questions. To do this, we followed the steps outlined by Braun and Clarke (2006). This applied, inductive approach permitted novel themes to emerge. Third, tentative themes were assigned to codes and refined after reviewing further responses. Answers to survey questions were read as a unit, and themes were tabulated. The researchers have different training and expertise (law, political and computing studies and criminology). To ensure findings and insights were not missed, we reflected on our own experiences and professional lenses through discussion during the coding process. The discussion that follows reports on the key intersecting themes arising from the qualitative survey answers which



Table 1 Gender and work focus of respondents

	UK	Aus	Total
Gender			,
Female (inc. transgender female)	n=208 (81.3%)	n = 165 (84.2%)	n = 373 (82.5%)
Male (inc. transgender female)	n = 38 (14.8%)	n = 27 (13.8%)	n = 65 (14.4%)
Other	n = 9 (3.5%)	n=2 (1.0%)	n = 11 (2.4%)
Prefer not to say	n = 1 (0.4%)	n=2 (1.0%)	n=3 (0.6%)
Sum	n = 256 (100%)	n = 196 (100%)	n = 452 (100%)
Primary focus of the workplace operatin	g in		
Domestic violence/stalking	n = 179 (58.5%)	n = 66 (29.6%)	n = 245 (46.3%)
Legal	n = 42 (13.7%)	n = 23 (10.3%)	n = 65 (12.3%)
Health	n = 19 (6.2%)	n = 27 (12.1%)	n = 46 (8.7%)
Housing	n = 11 (3.6%)	n = 11 (4.9%)	n = 22 (4.2%)
Child Protection	n = 21 (6.8%)	n=21 (9.4%)	n = 42 (7.9%)
Other	n=34 (11.1%)	n = 75 (33.6%)	n = 109 (20.6%)
Sum	n=306 (100%)	n = 223 (100%)	n = 529 (100%)

Table 2 Question 20: Do you consider the police response to and understanding of TFDA in Australia / UK adequate?

	Yes	No	Don't know
Australia	n=34 (17.3%)	n=107 (54.6%)	n=55 (28.1%)
UK	n=35 (13.7%)	n=148 (57.8%)	n=73 (28.5%)
Total	n = 69	n = 255	n=128

centered on policing and law enforcement's response to TFDA. The analysis uses written extracts, with participants being referred to as either 'Aus' (for Australian respondent) or 'UK' (for UK respondent) plus an identifying number corresponding to the order in which they completed the survey (e.g., Aus 1).

Results

Our survey suggests that both Australian and UK respondents perceive current policing responses to TFDA as inadequate. In both countries, many respondents answered 'no' (n=107 Australia, and n=131 UK; see: Table 2) to the prompt 'Do you consider the police response to and understanding TFDA in Australia and the UK adequate?' Support sector representatives provided additional written, narrative responses outlining perceived issues and obstacles to adequate policing of TFDA.

The qualitative responses touched on intersecting themes highlighting concerns about policing TFDA which centered on perceptions that: (a) police do not recognize TFDA as an aspect of coercive control and thus do not recognize its seriousness, (b) police receive inadequate training about TFDA, (c) police have insufficient time and personnel to tackle TFDA and (d) evidence collection is an obstacle to policing TFDA. These themes are discussed in turn below.

Perceptions that Police do not Recognize TFDA as an Aspect of Coercive Control and thus do not Recognize its Seriousness

Both Australian (n=30) and UK (n=54) respondents expressed concern that police did not properly understand how TFDA manifests in coercive control and the effects of, and risk associated with, this harm. Participants articulated a range of views about why this was the case, including that police officers continued to focus predominantly on physical abuse. This perspective was showcased in comments such as: 'police are unable to do anything unless the violence is physical' (Aus 24) and 'I think the police still respond predominantly to physical threat and are behind in their response to coercive behavior and stalking' (UK 31).

Several respondents also suggested that a failure to recognize the seriousness of TFDA resulted in police short-comings in effectively responding to victim-survivor disclosures, with one participant reporting that 'clients are often sent away' (Aus 61). Alternatively, participants suggested that police sometimes recommend victim-survivors take potentially harmful actions. For example, respondents commented: 'Survivors will be told to change their number/block perpetrator' (UK 6); police 'tell women to just delete your Facebook account, block his number then' (UK 29) and:

Police rarely take tech related abuse seriously, often encourage women to block perpetrators and tell them that they should stop using internet. Police often downplay seriousness of tech related abuse or do not have enough training or knowledge to know how to investigate these matters (Aus 19).

One respondent said '...clients are told to change their number when this may place the client at further risk' (Aus 42).



Another respondent identified that recommendations to disconnect from technology are a form of victim-blaming. She remarked: 'Why should the victim take themselves off of social media because of someone else's behavior. A lot of Victim-blaming in this world' (UK 73).

Some respondents perceived that police failed to respond, not necessarily because they did not recognize TFDA, but rather because they held a view that TFDA, in the context of an intimate relationship, is less severe when compared to other forms of abuse. One participant observed that 'police consider TFDA "low level" unless it involves children' (Aus 16) and another thought that police privileged more public forms of TFDA:

I am dismayed when I see police taking tech related abuse of high-profile people seriously in cases such as football players but they turn women away or inform them nothing can be done when it is their ex-partner or family members perpetrating this abuse (Aus 20).

Several respondents suggested that sexist attitudes continued to inform police assessments of TFDA claims. Some participants claimed that police perceive female victimsurvivors as lacking credibility or being paranoid about the presence and possibilities of technology: 'for most officers [TFDA] is either too difficult or they judge the victim and are manipulated by the perpetrators, especially if they identify as [the] same sex as perpetrators eg. Male officer male perpetrators' (Aus 50). The view that police did not believe victim-survivors was reported by multiple respondents: 'police don't believe women that their phones are being monitored by spy/hacking software' (Aus 52) and 'way too many cases of women being told (by Police) that 1) they were wasting their time 2) that couldn't possibly happen, 3) if you don't have proof who did it we can't write a report 4) you're making this all up' (Aus 65) and '...clients find their concerns dismissed by police as paranoia' (UK 36). One service provider commented: 'The biggest fear our service users often have about approaching police with regard to tech-related crime is a judgement from the police, particularly if that crime has a sexually-explicit nature' (UK 52).

Some respondents believed that the level of police knowledge about the capability and presentation of TFDA, and therefore police responses, were inconsistent across and within police units. Participants observed: 'It appears to vary by Police force / professional. Some have a very good understanding and others have appeared dismissive of the issue at times' (UK 25) and 'there needs to be a way to create a more consistent approach in practice irrespective of personal feelings around the issue, the family involved, and class/barriers faced by individuals and families' (Aus 58). Others suggested that TFDA knowledge was limited to

those police in specialist units: 'Other than specialist departments I don't think the police know very much about TFDA or take it seriously' (UK 26).

Participants commonly noted that police focused on physical abuse rather than understanding TFDA as an aspect of coercive control. In the view of many participants, this focus resulted in both police failure to recognize TFDA but also a police failure, in many cases, to take TFDA seriously when it was disclosed or reported. Participants also indicated that police may believe men over women and claimed that there are inconsistencies in organizational regulation of TFDA. Knowledge and capability to address this harm was sometimes said to be confined to specialist units.

Perceptions that Police Receive Inadequate Training About TFDA

Many respondents said that police training about domestic abuse generally, and TFDA in particular, was low. One participant commented: '[t]he police response to domestic abuse overall is poor. Many victims of DV [domestic violence] are met with police officers who don't even know the basics of DV, let alone tech abuse' (UK 15). Another observed that police 'don't have the skills or the knowledge to be any better at tech than anything else' (UK 12).

A number of respondents (n=30 Australia; n=37 UK) commented explicitly on the need for dedicated TFDA training: 'most police officers have limited exposure to technology-based education...' (Aus 34) with several respondents pointing to lack of police education and awareness about specific technologies. Participants claimed, for example, that police have 'no basis [sic] knowledge about Spyware or IP, ISP...' (Aus 62) and police 'don't know the difference with IP and ISP' (Aus 63). Some UK respondents emphasized the distinction between specialist domestic abuse units and non-specialist units: 'The police try but frontline officers are not equipped ... for the modern age... Specialist teams are well equipped but can only do so much' (UK 69). Another respondent identified the absence of knowledge transfer across police units:

Policing is very behind the times in terms of understanding and use of modern technologies overall, and there is a lack of knowledge across most non-specialized departments of the capabilities of technology. Digital-specialized units have this knowledge but it is not frequently disseminated to larger units such as response policing, and training is poor (UK 33).

¹ IP refers to Internet Protocol and ISP refers to Internet Service Provider.



Numerous participants suggested that the speed of technological innovation could hinder, and explain, deficits and the absence of police training. For example, Australian respondents observed: 'the fast pace of technological advances... [m]ost police are not tech experts and their knowledge and understanding of tech abuse can be very limited. Tech abuse requires tech experts' (Aus 37) and police 'response is slow-paced compared to advancement of technologies and their use in [domestic abuse]' (Aus 48).

Several UK respondents highlighted 'inadequate' (UK 91) or inconsistent or 'hit and miss' (UK 89) training on TFDA as a concern. While it was not always clear what service the participant provided in the context of domestic abuse, some UK (n=7) and two Australian participants identified as police officers or working in law enforcement. Police officer respondents, who have significant insight into the dynamics within a police force, stated that they 'need technology training' (Aus 6) and that training is, at best, inconsistent: 'I do not have a full understanding and I know my staff do not, therefore inadequate training' (UK 68) and 'police in my area are well resourced and trained re DV/A... unsure about other forces.' (UK 81).

Australian participants stressed the need for education and professional development that encouraged police to understand TFDA as part of coercive control and look for the patterns of abuse and control. Respondents commented that '[o]ur system is still very focused on incidents rather than dynamics of power and control' (Aus 40) and '[p]olice often will tell women to just block the perpetrator, or, due to the nature of emotional/psychological abuse, [do] not understand that the message is part of a pattern of coercive control' (Aus 56). A UK respondent identified that even specialist and well-trained police units might minimize domestic abuse and respond inappropriately if they fail to use a coercive control lens to investigate TFDA:

Cybercrime units have no understanding of domestic abuse and stalking and do not understand the tactics or the dynamics. They fail to see patterns of behaviour and lack a comprehensive understanding of the impact of abuse that they consider is *low level* Abuse is often minimized and response is dismissive with a total lack of understanding of the fear a victim is experiencing (UK 32).

Perceptions that Police have Insufficient Time and Personnel to Tackle TFDA

Police limitations in terms of time and resources were also identified by some participants (n=12 Australia; n=18 UK). Some UK-based participants (n=5) referred

to difficulties police face in responding to TFDA because of the power of, and gatekeeping enforced by, technology companies. For example: '[m]ajor companies facilitate tech abuse, e.g.: Facebook, whats app, Apple' (UK 96) and '[p] olice can only do so much as it seems the companies who produce the Tech seem to have a lot of power especially if they are foreign companies that abide by different laws and policies' (UK 93). Consistent with these concerns, respondents also considered the role of tech companies, identifying that 'organizations such as Facebook [are] working harder to protect their clients, access to crucial evidence is becoming harder' (Aus 21) and questioning 'what role do they [tech companies] have in working with police in this sort of thing' (UK 58).

While participants commonly stated perceptions about the lack of police expertise regarding TFDA, some viewed the limited availability of personnel to respond to TFDA as an issue. Several UK respondents referred to the long waiting periods victim-survivors faced for law enforcement to download phone records for evidence collection, with one person commenting, 'I understand a year is not uncommon' (UK 200). In a similar vein, Australian respondents observed 'not having the resources to get technical expertise required to remove spyware etc on devices' (Aus 5) and:

We are a regional based center and when clients have suspected tracking devices on their vehicles there is not a local police station that is equipped to finding these devices on the cars, police have had to come from the nearest metropolitan area, causing delays to locating and removal of these devices (Aus 53).

Australian participants emphasized the volume of TFDA and challenges in finding sufficient time to upskill to respond to it: 'I know from personal experience (police officer of 20 years) that there is a serious lack of resources and staff available to keep up with tech offenses and accessing evidence from tech devices...' (Aus 13) and '[p]olice can't keep up with the technology and sheer volume of devices needed to be examined' (Aus 67). Australian police were described as 'overwhelmed with work' (Aus 27) and 'overburdened by so many cases' (Aus 29).

Perceptions that Evidence Collection is an Obstacle to Policing TFDA

Some respondents (n=17 Australia; n=27 UK) perceived that evidence collection was an obstacle to the effective policing of TFDA. As one participant noted, investigation and evidence collection are vital aspects of police work: 'prosecutions [of TFDA-related offenses] cannot take place if police aren't adequately investigating' (UK 107). There



were varied views about the difficulties faced by police regarding investigation procedures and evidence collection for TFDA matters. Some respondents thought that police 'can't prove stuff online easily so don't want to get involved...' (UK 83). Others contended that 'tech-abuse is more likely to leave an audit trail - unless the attacker is very clever at hiding their steps and very tech-savvy ...' (UK 58).

Some respondents in both UK and Australia noted the pressure on victim-survivors to collect evidence if they want a matter to proceed and to invest time, resources, and energy to prevent further abuse. One respondent commented that police responded only 'where the woman has had to put a lot of effort into doing their job for them' (Aus 38) in compiling and storing evidence of the TFDA to which she was subjected. Another commented that 'police want victims to do their own investigation and collect their own evidence' (UK 47).

In relation to the investigation of TFDA offenses, mobile phones were recognized as an important source of evidence. However, respondents had mixed views about the obstacles police faced in collecting data from mobile phones. A common issue UK respondents perceived was that perpetrators often did not allow police to look at their phones. A participant remarked: 'Perps. have refused to allow the police access to their phones to prove that they have sent messages' (UK 5).² Other UK respondents suggested that data protection laws (among other obstacles) stymie the collection of this material: 'For those who recognize such abuse, their work would be limited due to the lack of evidence (data protection) and the lack of support from the system' (UK 28) and:

[a]s the law states that passwords/PINS are not to be given out,³ the onus on protecting this information is on the individual's account, it can be impossible for women to prove that the [perpetrator] has accessed this information without permission, making any recourse difficult (UK 105).

Participants maintained that victim-survivors often allow their own phones to be examined but that police seizure of devices can elevate risk: 'without their phone the victimsurvivor is potentially 'vulnerable and unable to call for help if needed' (UK 49).

A concern expressed by both UK and Australian participants was that it was often difficult to establish the identity

of the perpetrator to the required legal standard, especially given the anonymity afforded by digital media:

... clients report they feel tech abuse is not properly understood or investigated. Online harassment becoming very hard to evidence eg. if a perpetrator has made and used fake accounts ... (UK 18).

Another UK respondent noted that the alleged perpetrator often claims, 'others accessed it [the phone] so can not prove it was them they will say its unlocked so easy for other to access' (UK 85). Australian respondents raised similar concerns: 'clients have reported police unwilling to follow up on tech-based breaches [of protection orders] on basis they cannot "prove" that the breach was committed by a particular person' (Aus 3) and 'clients report issues where local Police say they can't help if the number sending abuse is listed as "private" (Aus 10).

Some participants expressed frustration with police inaction and refusal to bring charges: 'I reported to the police and provided evidence of the harassment and the threats. They responded with "there is nothing we can do; he hasn't followed through on any of the threats" (Aus 21) and '[t]he police do not take it seriously unless direct threats...' (UK 105). Numerous respondents reported that it took a long time to collect evidence, and that this delay had significant impacts on charging processes: 'the time it takes to receive communications data in an evidential format means that charging decisions are usually more delayed and this effects the quality of service and likelihood of a conviction' (UK 21).

Discussion

The results of this first cross-country comparative survey of Australian and UK service representatives working in organizations that engaged with domestic abuse victim-survivors provide a clear indication of the perceived inadequacy of TFDA policing in both countries. In particular, the study points to perceived limitations in police understanding of TFDA, shortcomings in police organizational capabilities, capacity and resources, and challenges in evidence-gathering processes.

Three related issues stand out that may point to police training needs. These include perceptions that TFDA is often not taken seriously or understood as part of coercive and controlling behavior, that victim-survivors may be being advised to disconnect from technology as a response to TFDA and a perception that female victim-survivors are not believed. We consider these issues in turn.



² Note that while laws differ across jurisdictions, most commonly police are allowed to take a person's phone when the person consents, when they are arrested and their possessions are therefore seized, or pursuant to a search warrant (Raj & Marshall, 2019).

³ Sharing passwords is a violation of information security policies and sometimes is a criminal offense (Curtis & Oxburgh, 2022).

Consistent with previous research (Brown et al., 2021; Harris & Woodlock, 2022; Woodlock et al., 2022), study respondents across Australia and the UK commonly contended that police do not take TFDA into account, suggesting that police often preferred to focus on abuse which leaves visible injuries rather than understanding it as an aspect of coercive control. A recent UK study found that in determining whether domestic abuse was 'serious', police most often mentioned physical assaults and injuries rather than harassment or breach of a protection order (Myhill, 2019, p. 9). In an Australian online survey of 493 lawyers and community advocates, respondents identified that in a 'substantial' number of cases, police justified their refusal to act in response to domestic abuse on the basis that the alleged victim had no visible physical injuries (Goodman-Delahunty & Corbo Crehan, 2015, p. 1015). This is said to occur even though coercive control is increasingly recognized in both Australia and the UK as underpinning domestic abuse (Australian Government, 2022; Home Office, 2015). Indeed, research has shown that weaponizing digital media and devices, especially smart technologies, is integral to facilitating coercive control and can be harmful (Fiolet et al., 2021; White, 2019). Death review taskforces and researcher reviews of domestic homicides have found that tech abuse is an emerging trend in domestic abuse homicide and filicide cases (McLachlan & Harris, 2022). Without an appreciation of how TFDA manifests in the lived experience of victim-survivors, policing efforts to regulate and respond to coercive control will not be realized.

Some participants noted that police sometimes advise victim-survivors to disconnect from technology or change their own tech-related behavior. However, as has also been documented in the literature, such advice is unlikely to result in a cessation of perpetrator behavior. It places the burden on victim-survivors to manage the abuse rather than focusing on ensuring perpetrators are held responsible for stopping their abuse (Douglas et al., 2019). Further, a loss of access to, and perceived control of, a target can result in an increase in physical abuse and/or in-person stalking (Dragiewicz et al., 2019; Harris & Woodlock, 2022).

Participants also suggested that the lack of gravity afforded to TFDA by police may result from sexist attitudes and misogynistic ideas underpinning policing more broadly. This concern is consistent with revelations in Australia and the UK, where recent inquiries into policing in Australia and the UK have heard how the sexist and misogynistic attitudes of police impacted negatively on police responses to domestic abuse (Baroness Casey Review, 2023; Richards, 2022).

Many of the survey contributors in both Australia and UK perceived that police needed specific training about TFDA to improve police understanding of its seriousness and impacts and their response efforts. While improved police training is

a common recommendation of studies investigating police responses to TFDA (Flynn et al., 2023; Taylor-Dunn, 2022), we could find no studies that explored the impact of TFDA training of police attitudes and responses. However, there is evidence that training done regularly and in a consistent and quality assured way can shift police attitudes (Brennan et al., 2021). Training can improve police empathy with victim-survivors of domestic abuse, their understanding of victim-survivors, their appreciation of the need for intervention to ensure safety (Dowling et al., 2019) and their confidence in responding to domestic abuse (Islam & Mazerole, 2022). The authors are aware that, as of 2023, the College of Policing in the UK is working on an eLearning resource on violence against women in the digital environment. Furthermore, in Australia, the Queesnsland Police Service has, as the result of the recommendations of an inquiry (Richards, 2022), begun TFDA training for specialist officers, which is to be rolled out to generalist officers in coming years. Some of the authorship team have delivered the Queensland training.

Many of the respondents in our study suggested that investigations of TFDA are often time-consuming and require expert skills. These issues may also be linked to the need for TFDA training. Increasingly reports have documented that responding to domestic abuse is a core role for the police, with Australian studies showing police spend much of their working week responding to domestic abuse (Blumer, 2016; Segrave et al., 2018). It is likely that TFDA, already a common aspect of domestic abuse, will become even more widespread in the coming years, given the reduced cost and increased uptake of technology (Harris & Vitis, 2020). This underscores the need for TFDA training, sufficient personnel, and resources to be part of standard police training and resourcing in responding to domestic abuse.

Some participants suggested that technology developments were too fast-paced for police to follow. However, most TFDA reported by victim-survivors is relatively unsophisticated. It often involves obsessive text messaging, sharing of images and GPS tracking devices being installed (Douglas, Harris, & Dragiewicz, 2019; Tanczer et al., 2021; Woodlock et al., 2020). General duties police officers should be sufficiently trained to recognize and respond to these common forms of TFDA as an aspect of coercive control. If they are failing to recognize and respond, this may point to gaps in training around coercive control (Brennan et al., 2021). In some cases, perpetrators may use unsophisticated technology in ways that are novel or not easily recognized (Williams et al., 2023), and in such cases, greater expertise may be needed. Several UK respondents spoke about the role of cybercrime units in supporting general duties police to respond to TFDA. Cybercrime unit personnel are not generally expected to respond to domestic abuse (Burton et



al., 2021; Stevens et al., 2021). If such units are to continue to be a resource for domestic abuse response, their training needs to extend beyond understanding cybercrimes as primarily an economic security issue to being more human-centric and safety focussed (Slupska & Tanczer, 2021).

Some respondents in the UK pointed to the power of tech companies such as Apple and Meta. They saw these corporations effectively as gatekeepers, and as an explanation for why police may be unable to collect evidence of TFDA. However, most prominent technology companies that service providers encounter have EU-based headquarters. This makes them contactable. Besides, alongwith other corporations, tech companies operate under and within established national laws meaning police have both the avenues and the right to ask for data via established legal routes such as a subpoena. Some providers have set up portals for law enforcement requests.⁴ Additionally, a handful of tech vendors have begun to address issues of TFDA by releasing design principles or directly working with domestic abuse support organizations in the design of tech products (Burton et al., 2021). Whilst more industry-wide responses to TFDA are needed, at the same time, it is well-established that corporations may be reluctant to focus on the misuse of their devices and services in domestic abuse cases (Suzor et al., 2019). However, if tech corporations do not meet expected community standards, greater regulatory oversight may be needed to identify and address inaction and poor practice.

Several UK participants referred to the time period victim-survivors faced waiting for police to download evidence from their phones. In the UK and Australia, police are not required to commit to a timeframe for collecting evidence from a device whether sought consensually or under a warrant. Given competing demands on police personnel, it may be challenging to specify a timeframe for return of devices. However, when victim-survivors provide their phones or laptop to police, it may help victim-survivors to plan if police offer an estimated time, with police able to justify and explain delays in exceptional circumstances. Loss of one's device access may feel both inconvenient and intrusive. Personal mobile phones often store a significant amount of personal data beyond what is necessary for the investigation of claims of TFDA and mobile phones are also used by many survivors as a primary way to connect with their support network (Havard &Lefevre, 2020). Uncertain periods of police holding of victim-survivors' mobile phones may also leave victim-survivors feeling more vulnerable and disempowered (Douglas, Harris, & Dragiewicz, 2019). Similar to unjustified and intrusive police requests for personal data (Harris & Woodlock, 2022), delays in returning devices may be experienced as a type of secondary victimization.

Notably, technology such as computational text mining may solve this issue (Neubauer et al., 2023). Greater Manchester Police are trialing an app that allows police to collect evidence from the victim-survivor's phone at the scene of the incident or time of the report (Greater Manchester Authority, 2022), meaning the victim-survivor can retain their phone.

While collecting evidence as part of an investigation of domestic abuse is the role of the police, many participants pointed to pressure being placed on victim-survivors to collect their own evidence. Indeed, new apps can assist victimsurvivors to document the required evidence. Examples of these products include the Bright Sky App (Hestia, 2023) and the Arc App (Arc, 2023).⁵ For some victim-survivors, such tools may be empowering as they may feel like they are taking some control of their circumstances (Woodlock et al., 2020). However, these technical solutions can also create risks and obstacles for some victim-survivors. For instance, their device may be targeted by the perpetrator in his efforts to destroy or remove the evidence, or their case may not be taken seriously if they have not taken these proactive measures to collate proof of harm and wrongdoing (Woodlock et al., 2020). The shift to such digital products may be considered a form of outsourcing of responsibilities commonly held by the police. As some participants in our study lamented, this shifting of responsibility creates further burdens on victim-survivors.

Several participants also referred to issues associated with obtaining evidence proving the alleged perpetrator's identity. Where the alleged perpetrator denies their involvement and the evidence is ambiguous, proving identity to the requisite standard may be more difficult. However, in domestic abuse cases, the credibility of the accused will often be challenged by the victim-survivor. In such circumstances, there may be sufficient evidence to charge or apply for a protection order, leaving it to the court to make findings about who is the most credible witness, especially in circumstances where the burden of proof is on the balance of probabilities (as it is civil applications for protection orders) (Douglas & Burden, 2018).

Limitations

The research design has several limitations. First, due to a reliance on self-selection, the research does not draw on a representative sample of support sector representatives in either Australia or the UK, and our sample features few police respondents. Second, the sample was collected over an unusual period in history where both Australia and the UK were still managing the challenges associated with the COVID-19 pandemic. Research has now identified the

These apps provide information to victim-survivors about domestic abuse, suggest support routes and help them to record their story.

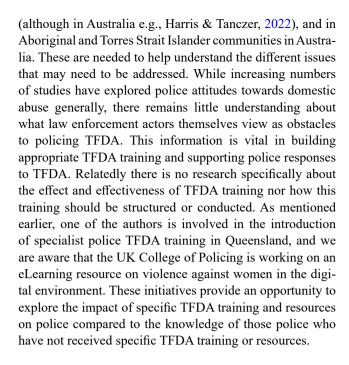


⁴ See for example the *Facebook: Law Enforcement Requests*, online portal: https://www.facebook.com/records/login/.

significant contribution of the pandemic to the exacerbation of domestic abuse, including higher rates of TFDA (Pina et al., 2021; Flynn et al., 2021). The pandemic also impacted on domestic abuse service providers significantly, requiring workers to restructure their work, work remotely and cope with a higher emotional burden (Burd et al., 2023). The pandemic likely influenced who was able to complete the survey and the experiences that were reported. Third, while the UK and Australian environments are similar in many ways, different legal regimes and cultural groups exist across both countries. In Australia, there are nine different jurisdictions corresponding to each state and territory and to federal law and in the UK, England/Wales, Scotland, and Northern Ireland have different legislative responses and policing processes. In contrast to Australia, all the UK jurisdictions had a coercive control offense in place during the survey period (Wangmann, 2022). While survey participants did not highlight this offense, its existence may impact on approaches to policing TFDA and survey participants' perceptions. Other limitations include the differences between cultural contexts. For example, few participants distinguished between urban versus regional area police responses to TFDA, which are likely to be different (Harris & Woodlock, 2022). Further, in the Australian context, our survey did not attract consideration of the police response to TDFA in Aboriginal and Torres Strait Islander communities in Australia, or migrant and refugee communities in Australia and UK, which is also likely to be experienced differently (Brown et al., 2021; Vasil & Segrave, 2023). Despite these limitations, the research identifies trends in the data that reflect the findings of other scholars as outlined in the literature review. The conclusions of this study contribute to the existing evidence base on issues regarding the understanding of TFDA and the need to support police responses.

Future Interventions and Research

This study identifies both practical interventions that could be introduced to respond to issues raised by participants and directions for future research. The findings provide valuable insights for policymakers, law enforcement agencies, and service providers to develop effective strategies to combat TFDA and improve policing of this evolving form of abuse. Recent reviews of policing in Queensland, Australia (Richards, 2022) and the UK (Baroness Casey Review, 2023) that explored responses to domestic abuse and the internal cultures of police services have highlighted there is an urgent need for police reform regarding police responses to domestic abuse in both countries. However, there are few studies that have specifically investigated issues and obstacles regarding police responses to TFDA in contexts such as rural and regional communities in both the UK and Australia



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Declarations

Competing interests The authors declare that there is no conflict of interest.

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