eSafetyresearch

Children and technology-facilitated abuse in domestic and family violence situations

Full report

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Contents

Research@eSafety *5*
Data sources *5*
Related eSafety research *5*
Acknowledgement *7*
Definition of terms *8*
Executive summary *9*
Key findings **9**
Introduction *13*
Definition of domestic and family violence **13**
Methodology **14**
Survey results *15*
Prevalence of technology-facilitated abuse **15**
Types of technology-facilitated abuse involving children **16**
1. Monitoring and stalking 16
2. Threats and intimidation 18
3. Blocking children's communication 19
4. Bypassing cyber security affecting children 20
5. Sexual abuse 21
6. Impersonation 22
7. Other types of technology-facilitated abuse 23
8. Co-occurring abuse 23
1. Co-occurring financial abuse 24
2. Co-occurring blocking of parental communication 25
3. Co-occurring impersonation 25
4. Co-occurring threats 25

Unique dynamics of technology-facilitated abuse in underserved communities **26**
1. Aboriginal and Torres Strait Islander communities 26
2. Culturally and linguistically diverse communities 27
3. Women with disability 28
4. Rural/remote areas 30

Technologies involved in abuse **30**
Impact of technology-facilitated abuse on children **32**
Strategies used by adult victims to reduce technology-facilitated abuse of children **33**
1. Education and communication 34
2. Changing devices or settings 35
3. Reporting 35
4. Parental monitoring of children's communication 35
5. Limiting children's use of technology 36
6. Blocking numbers and accounts 36
7. Empowering victims 37
8. Screening 37
9. Addressing perpetrators' behaviour 38

Focus groups **38**
Young people *40*

Participants **40**

Dynamics of technology-facilitated abuse **40**
1. Technologies 41
2. Contact with fathers 42
3. Technology-facilitated abuse experiences 43
   a. Consequences for avoiding contact with perpetrators 44
   b. Impersonation 45
   c. Destroying and disabling devices 45

Impact of technology-facilitated abuse on young people **46**

Protective strategies **47**
1. Changing account settings 47
2. Hanging up and not answering 47
3. Blocking accounts and numbers 47
4. Collecting evidence 48
5. Withholding information from perpetrators 48
6. Help-seeking 49

Summary **50**

Women who are domestic and family violence survivors ***51***

Participants **51**

Technologies **51**

Dynamics of technology-facilitated abuse involving children **51**
1. Children are highly involved in technology-facilitated abuse in domestic and family violence . 51
2. Technology-facilitated abuse continues at separation 54
3. Post-separation co-parenting is a key context for abuse 54
4. Most abuse involves common technologies 55
5. Systems fail to recognise technology-facilitated abuse as part of coercive control 56

Impact of technology-facilitated abuse **57**

Identical devices, applications and behaviours are used to abuse and protect **57**

Protective strategies **58**
1. Acknowledging the abuse 58
2. Monitoring children's communication 58
3. Changing passwords and settings 59
4. Blocking accounts and numbers 59
5. Physical measures 59
6. Legal measures 60

Positive uses of technology in the context of domestic and family violence **61**

Summary **63**

Men in perpetrator programs ***64***

Participants **64**

Dynamics of technology use and abuse **64**
1. Prerogative to control the family's technology use 65
2. Men used basic technology 66
3. Reliance on smartphones to communicate 67
4. Use of technology at separation and following police intervention 67
5. Impact of technology-facilitated abuse on children and women 67
6. Technology in men's daily lives 67

Summary **68**

Technology security threat analysis ***69***

Areas for consideration ***71***
1. Education about technology-facilitated abuse in the context of domestic and family violence. 71
2. For children 71

3. For non-abusive parents of children affected by technology-facilitated abuse 71
4. For domestic and family violence perpetrators 71
5. For professionals who work with domestic and family violence cases 72
6. For legal professionals 72
7. For police officers 72
8. For schools 72

Other strategies 72
1. Providing hands-on technology security support 72
2. Empowering victims 73
3. Developing tools 73
4. Providing access to affordable tech 73
5. Legal action 73

Future research 74

Conclusion 75

Appendix A: Detailed methodology 77
1. Professionals who work with domestic and family violence cases 77
Survey 77
Survey participants 77
Measures 78
Practitioner focus groups 81
2. Young people exposed to domestic and family violence 81
3. Adult domestic and family violence survivors 82
4. Domestic and family violence perpetrators 82
5. Limitations 83

References 84

Research@eSafety

The eSafety Commissioner (eSafety) supports, encourages, conducts and evaluates research about online safety for Australians. The eSafety research program tracks trends, collects, analyses and interprets data and uses this to provide an evidence base for the development of eSafety resources and programs. eSafety also works closely across agencies and internationally so that its research program can proactively identify and explore online safety issues.

Data sources

Data in this report is drawn from eSafety's 2019-2020 study on children and technology-facilitated abuse in domestic and family violence situations. The study included interviews with four young people (aged 16 to 18) affected by technology-facilitated abuse in the context of domestic and family violence, 11 mothers of children in this situation, and 11 men who were participants in a men's behaviour change program for domestic violence education and intervention. It also included a survey of 515 professionals who encounter technology-facilitated abuse in the context of domestic and family violence as well as focus groups with 13 practitioners who work with domestic and family violence cases.

Related eSafety research

eSafety's publications on related topics include:

eSafety (2012) *Understanding the attitudes and motivations of adults who engage in image-based abuse,* esafety.gov.au/sites/default/files/2019-10/Research_Report_IBA_Perp_Motivations.pdf

eSafety (2019a) *Online safety for Aboriginal and Torres Strait Islander women living in urban areas*, esafety.gov.au/about-us/research/online-safety-aboriginal-and-torres-strait-islander-women-living-urban-areas

eSafety (2019b) *Parenting in the digital age,* esafety.gov.au/about-us/research/parenting-digital-age

eSafety (2019c) *eSafety for women from culturally and linguistically diverse backgrounds: Summary report*, esafety.gov.au/-/media/cesc/esafety-corporate/research/cald/esafety-for-women-from-culturally-and-linguistically-diverse-backgrounds.pdf

Research published by eSafety is available online at esafety.gov.au/about-the-office/research-library

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eSafety recognises the numbers and details reported here represent lived experiences. We acknowledge the damaging effects of technology-facilitated abuse on families and communities. This report discusses issues that some people may find distressing and it includes abusive language.

If you or someone you know is at risk of immediate harm, please call Triple Zero (000). For counselling and support, please contact:

Lifeline 13 11 14

Kids Helpline 1800 55 1800

1800Respect 1800 737 732

Beyond Blue 1300 22 4636

MensLine Australia 1300 789 978

Definition of terms

Terms, in this report, are defined as the following:

Adult victim/survivor – A survivor of domestic and family violence who is also the parent of a child who has experienced domestic and family violence. In this research, the mothers interviewed were always the adult victim/survivor/non-abusive parent.

Coercive control – A pattern of domination that includes tactics to isolate, degrade, exploit and control victims, as well as to frighten them or hurt them physically. It provides a framework for understanding domestic violence that emphasises the non-physical forms of abuse. The concept underpins the definition of family violence in the *Family Law Act 1975*.

Co-occurring abuse – Abuse that occurs alongside technology-facilitated abuse, including behaviours directed at children but not necessarily involving technology, as well as behaviours directed at adult victims.

Domestic violence specialist staff – A person who works in a specialist family violence service that provides frontline support for those experiencing family violence.

Dual use technology/dual use application – Technologies which have a legitimate purpose but can be misused for unintended purposes, for example smartphones, smart watches, fitness trackers and applications such as GPS tracking mechanisms shared across devices, for example Find My Phone.

Non-abusive parent – See adult victim/survivor.

Perpetrator – A perpetrator of domestic and family violence. In this report, all the perpetrators interviewed were male.

Practitioner – See domestic violence specialist staff.

Professional – A person who has worked directly with victims or perpetrators of domestic violence in a professional capacity. This includes domestic violence specialist staff and those from the broader workplace who have worked directly with those impacted by domestic violence, for example teachers and lawyers.

Technology-facilitated contact – contact with another person using a device, service or app.

Underserved community – A community that faces barriers in accessing and using victim services and includes populations that are underserved because of language barriers, economic limitations, disabilities or geographic location.

Young people – interview participants who were 16-18 years old at the time of interview.

Executive summary

eSafety commissioned research on the dynamics and impact of technology-facilitated abuse involving children in the context of domestic and family violence in 2019-20. The research drew on a survey and focus groups of professionals who work with domestic violence cases, and interviews with mothers who are survivors of domestic violence, young people impacted by technology-facilitated abuse in domestic violence situation and fathers in men's behavioural change programs.

The research investigated:

- the role of technology in children's exposure to domestic and family violence
- the impact of technology-facilitated abuse on children and young people
- professionals' knowledge about technology-facilitated abuse involving children in the context of domestic and family violence
- young and adult survivors' perspectives of technology-facilitated abuse
- perpetrators' perspectives on technology and communication with their children
- strategies and resources to protect children from technology-facilitated abuse.

Key findings

Children were heavily involved in technology-facilitated domestic and family violence

They experienced abuse in two key ways:

1. Perpetrators directly abusing children
   The most common types of abuse directed at children were monitoring or stalking, threats, intimidation and blocking their communication.

2. Perpetrators involving children in technology-facilitated abuse directed at their mothers

This is where perpetrators mined children for information, encouraged them to participate in technology-facilitated abuse, gifted them GPS-enabled devices that posed cyber security risks, sent abusive messages to children's devices and called children's phones in order to verbally abuse their mothers.Children were involved in technology-facilitated abuse in about 1/3 of domestic violence cases

Professionals estimated the prevalence of technology-facilitated abuse involving children in domestic and family violence cases at 27%. Estimates differed across professional groups.

Types of abuse targeting children

The most common categories of abuse directed at children were monitoring and stalking (45%), threats and intimidation (37%), and blocking communication (33%).

Young people[1] interviewed for this study reported that abusive texts and harassing phone calls were the most common types of abuse they had experienced as children. They described persistent abusive, controlling, threatening and manipulative technology-facilitated communication. Perpetrators used technology to fish for information about their children and other family members. Perpetrators also impersonated others to contact and harass their children, destroyed children's devices, controlled family technology use, logged into accounts without permission and made threats via text message.

Technology-facilitated abuse harms children

Young people, mothers and professionals reported that technology-facilitated abuse in domestic and family violence had a number of harmful effects on children. These include: mental health issues (67%), feeling fearful (63%), feeling guilty for disclosing information (59%), harm to a child's relationship with their non-abusive parent (59%), routines and activities being negatively affected (59%), and having a sense of being constantly watched (52%). Almost half the cases resulted in children becoming isolated from family and friends (48%). The young people interviewed also reported that technology-facilitated abuse had negatively affected their education and strained relationships with both parents.

Children have distinct needs

Due to their developmental stage and dependency on adults, children's needs are unique. Mothers and professionals reported that children need help from adults to both avoid and manage technology-facilitated abuse. Young children, for example, often had contact with perpetrators using technology (technology-facilitated contact). This could decrease risks associated with face-to-face contact, however, monitoring this communication for safety purposes can be difficult.

The young people we interviewed for this research reported knowing more about technology than both their parents and noted their need for safe devices and accounts. Those who relied on mobile phones or accounts owned by perpetrators found it difficult to avoid technology-facilitated abuse. Further, they expressed a desire for control over whether to, and how to, communicate with perpetrators using technology.

Most abuse involves common technologies

Most of the abuse reported in this research involved the misuse of common devices, services and functions. These cases involved dual use technologies – those which have a legitimate purpose but can be misused for unintended purposes – rather than purpose-built spyware. Dual use technologies include commercially available devices such as smartphones, smart watches and fitness trackers.

Perpetrators in this study also abused services such as cloud-based storage, cross-device message synching and 'find my device' applications. Mobile phones were the most frequently used technology (in 79% of cases). The most common services used were texting (75%) and social media services like Facebook (59%) and Snapchat

[1] We use the term young people rather than children when referring to these interview participants because they were 16-18 years old at the time of interview. They discussed abuse that occurred while they were children.

(43%). Cases involving other GPS tracking-enabled devices (36%) and spyware (28%) were reported in about a third of cases. The qualitative data indicates that a significant portion of what people understand as spyware may, in fact, be the misuse of dual use technologies.

Post-separation co-parenting is a key context for abuse

Post-separation co-parenting arrangements provided ample opportunities for technology-facilitated abuse. For example, adult victimsand professionals described emails with subject lines referencing their/a child but containing written abuse directed at the mother. Even when domestic violence orders were in place, and helpful in managing some forms of abuse, communication about parenting was frequently used as an avenue to continue abusive communication. When children moved back and forth between houses, their devices could be used to gather location and other information. Perpetrators also used children and their devices to gather information about their estranged partners' location and activities, for example by asking children to show their surroundings during video calls. Post-separation co-parenting was also an opportunity to engage in coercive and controlling behaviours, such as using text messages to engage in high-stakes negotiations while refusing to return the child to the other parent.

Technology-facilitated abuse involving children most often occurred alongside other forms of abuse directed at mothers – abuse that indirectly affected children also. Professionals estimate that 59% of domestic and family violence cases include withholding or threatening to withhold child support, and 46% involve blocking the adult victim's online access to financial accounts.

Children are affected by the technology-facilitated abuse of adult victims

Common forms of technology-facilitated abuse include using technology to ask a child about an adult victim's location or activities (45%), using technology to learn, or try to learn, about a new home location (45%) and asking for, or obtaining, the adult victim's phone number from the child (40%). Almost half the domestic and family violence cases involved a perpetrator destroying an adult victim's devices (47%) or blocking their online access to financial accounts (46%). These activities indirectly affect children by interfering with communication between the adult victim and their children and decreasing the financial resources available to support children. These types of abuse may also isolate children from non-abusive parents, increase the entire family's isolation and further strain children's relationships with their abusive parent.

Identical devices, applications and behaviours can be used to abuse and protect

Identical technologies and devices can be used to perpetrate abuse and for protection and support. For example, some mothers and professionals reported perpetrators gifting smart watches to children to learn the location of their new residence. Other mothers and professionals used smart watches to monitor children's locations to protect them from perpetrators. In most cases, devices and applications themselves were not the problem – the real issue was the misuse of dual use technologies. Accordingly, understanding the context and meaning of technology use is essential to promoting appropriate responses to abuse.

Participants identified multiple strategies for protection

Young people, mothers and professionals described a wide range of strategies for dealing with technology-facilitated abuse. These range from blocking mobile numbers and accounts to replacing devices and seeking police and court intervention. Young people reported withholding information from perpetrators and helping their younger siblings to do so. Some young people reported adjusting privacy settings and changing accounts as strategies for protection. Young people collected evidence of technology-facilitated abuse. Mothers and professionals noted the importance of discussing the abuse with children, monitoring children's communication, changing passwords and settings, as well as blocking accounts and numbers as protective strategies. Mothers also used physical measures like covering phones in aluminium foil in an effort to block calls and avoid tracing, and physically storing them in a designated place in the home to control children's access. Some participants found that legal measures were useful to limit technology-facilitated abuse such as domestic violence orders containing detailed language prohibiting specific types of, or all, technology-facilitated communication. Significantly, participants also discussed the positive uses of technology. Parenting communication platforms were seen as useful to help decrease the volume of technology-facilitated abuse during communication about parenting issues. Technology also facilitated evidence collection to aid in obtaining domestic violence orders and reporting breaches of existing orders.

Resources

The young people interviewed for this research did not seek assistance for the abuse. Most had, however, received support from domestic and family violence services or child safety. This may indicate an opportunity for young people to have resources to help them deal with technology-facilitated abuse. They could benefit from devices and service plans that are not paid for by the perpetrator, with existing schemes to provide devices and credit to mothers, expanded to include young people.

Mothers and professionals were aware of, and used, a wide range of online and local resources when dealing with technology-facilitated abuse. Key resources include:

- online educational materials about how to check device settings, collect evidence and how to present it to the police or courts
- in-person training
- replacement phone programs providing access to safe and secure communications
- hands-on technical assistance with checking for devices at home or in cars and checking device settings.

Participants identified gaps in the availability of these services, including limited options for accessing replacement devices, technical support and advice in rural areas. Professionals and survivors also noted that private companies conducting technology security checks or helping with home security technology could be prohibitively expensive. Many study participants expressed a desire to know more about technology-facilitated abuse involving children and how to respond to it. Professionals and victims appreciated the resources they were already aware of.

Introduction

The eSafety Commissioner (eSafety) commissioned research on the dynamics and impact of technology-facilitated abuse involving children in the context of domestic and family violence in 2019. This is part of a program to develop new initiatives that enhance the safety of those impacted by domestic and family violence as part of the Women's Safety Package of measures (Australian Government, 2019).

As digital media are involved in every aspect of our personal lives, internet-connected technologies are becoming integral to the dynamics of domestic violence. Technologies we use every day, such as mobile phones, computers, devices and applications are misused by domestic violence perpetrators (DeKeseredy et al., 2017; Douglas et al., 2019; Dragiewicz et al., 2018; Dragiewicz et al., 2019a; Dragiewicz et al., 2019b; Lopez-Neira et al., 2019; Suzor et al., 2019).

This abuse affects children as well as adults (Campo, 2015; DeKeseredy et al., 2017; Dragiewicz et al., 2019; Markwick et al., 2019). Accordingly, this study looked for information about the ways children are involved in technology-facilitated abuse in the context of domestic and family violence.

The research investigated:

- the role of technology in children's exposure to domestic and family violence
- the impact of technology-facilitated abuse on children and young people
- professionals' knowledge about technology-facilitated abuse involving children in the context of domestic and family violence
- young and adult survivor perspectives of technology-facilitated abuse
- perpetrators thoughts about technology and communication with their children
- strategies and resources to protect children from technology-facilitated abuse.

Definition of domestic and family violence

Domestic and family violence is a pattern of coercive and controlling behaviour, often backed up with physical violence or threats of physical violence. This type of abuse is sometimes referred to as coercive control. Coercive control is a theoretical framework for understanding domestic violence that emphasises the importance of non-physical forms of abuse and their enactment in the context of gendered inequality in intimate relationships and families, cultural norms that produce gender inequality, and structures and institutions that reinforce it (Stark, 2007, 2012). Emerging research has shown how coercive control affects children in the context of men's violence against women (Callaghan et al., 2018; McLeod, 2018; Stark & Hester, 2019). Children are exposed to:

- verbal/emotional/psychological abuse
- control of time, space and movement
- monitoring/stalking
- physical violence

- threats
- sexual abuse
- control of pregnancy (birth control sabotage, forced abortion)
- financial abuse
- and isolation (Katz, 2016; Stark, 2007, 2012).

This study builds on the three previous Australian studies designed to build an understanding of the use of technology by perpetrators of domestic violence (Dragiewicz et al., 2019; Woodlock, 2017; Woodlock et al., 2019) to gather evidence about children's experiences with technology-facilitated abuse. The study was informed by international research on technology and abuse (Duerksen & Woodin, 2019; Freed et al., 2017, 2018; Harkin et al., 2019; Leitão, 2019; Marques et al., 2019; McDaniel & Drouin, 2019; Sjöblom et al., 2018). The study extends prior work with practitioners across Australia, with a focus on children's safety and well-being.

To our knowledge, this is the first study in the world specifically designed to investigate children's involvement in technology-facilitated coercive control. It reinforces decades of research evidence about the overlap between domestic violence and child maltreatment (Arai et al., 2019; Artz et al., 2014; Buckley et al., 2007; Campo, 2015; Edleson, 1999) as well as anecdotal findings about children from Australian research on technology-facilitated coercive control (Dragiewicz et al., 2019; eSafety, 2019c). Our findings show that children are directly targeted by perpetrators and indirectly affected by non-physical forms of coercive control primarily directed against their mothers. This supports previous research on children and coercive control which has found children are harmed by non-physical, coercive and controlling abuse such as monitoring, isolation, and emotional and financial abuse (Katz, 2016).

Methodology

This study used a mixed-method approach to gather information about the ways children are involved in technology-facilitated abuse in the context of domestic and family violence. It included:

- a survey of 515 professionals who work with domestic violence cases
- focus groups with 13 domestic violence specialist staff who work with children
- interviews with 11 mothers who are survivors of domestic and family violence
- interviews with four young people who had been affected by technology-facilitated abuse in the context of domestic and family violence
- interviews with 11 fathers in behaviour change programs for domestic and family violence.

This study was reviewed and approved under two ethics applications. The interviews and focus groups were approved under Griffith University Human Research Ethics Committee Reference Number 2019/810. The survey was approved under Griffith University Human Research Ethics Committee Reference Number 2019/886.

Further information on research design, recruitment and data analysis are provided in Appendix A.

Survey results

This section reports findings from a survey of 515 professionals who work with domestic and family violence.[2] Professionals provided important perspectives on the abuse for which victims sought support and perpetrators were reported.

Prevalence of technology-facilitated abuse

Overall, survey participants estimated that 27% of the domestic and family violence cases they knew about over the last 12 months included some form of technology-facilitated abuse involving children. Figure 1 presents the proportion of domestic violence cases that included technology-facilitated abuse of children.

Participants' estimates of the prevalence of this kind of abuse varied considerably by professional role. Participants who work more closely with families and children reported the highest proportion of cases involving technology-facilitated abuse affecting children.

Table 1. Proportion of domestic violence cases involving technology-facilitated abuse of children

	Number of participants	% of technology-facilitated abuse cases involving children
Proportion of child-involved technology-facilitated abuse	515	27%
Role		
Child safety worker	13	48%
Child safety other	16	31%
Victim support sexual assault and family support	37	38%
Victim support counselling, refuge, shelter	69	16%
Victim support information and other	60	31%
Corrections	4	8%
Police	21	12%
Probation/parole	3	27%
Other law enforcement	13	22%
Men's behavioural change	6	12%
Other offender services	4	21%
Immigrant and culturally diverse services	10	14%
Homelessness, housing, health	46	27%
Community and youth services	59	46%
Teacher or similar school employee	68	23%
Midwife	3	37%
Doctor, nurse, other medical	5	15%
Lawyer	36	34%
Other domestic violence professional	42	21%

Note: This table includes survey participants who provided useable data – those who said that they would know about technology-facilitated abuse involving children in the domestic and family violence cases handled by their organisation.

[2] 515 surveys provided useable data. Participants who said they would not be aware of cases of technology-facilitated abuse involving children in the domestic and family violence cases handled by their organisation were guided out of the survey and excluded from the analysis.

Types of technology-facilitated abuse involving children

Survey participants were asked about the types of technology-facilitated abuse involving children they had encountered in domestic and family violence cases over the last 12 months. They were asked to estimate how many domestic and family violence cases included 41 identified types of abuse involving technology. Abusive behaviours were grouped into six categories: blocking communication, threats, impersonation, monitoring and stalking, posting or sharing information, and cyber security.[3] The survey also included a range of questions about co-occurring abuse. Co-occurring abuse is defined as abuse that occurs alongside technology-facilitate abuse, including behaviours directed at children but not involving technology, as well as behaviours directed at adult victims. Figures 1 to 7 summarise the abuse reported by participants.

Figures 1 to 7 show that children are heavily involved in technology-facilitated domestic and family violence. Children experienced this abuse in two key ways:

1. Perpetrators directly abuse children. Monitoring or stalking, threats and intimidation, and blocking children's communication are the most commonly reported types of abuse targeting children.
2. Perpetrators involve children in technology-facilitated abuse directed at their mothers.

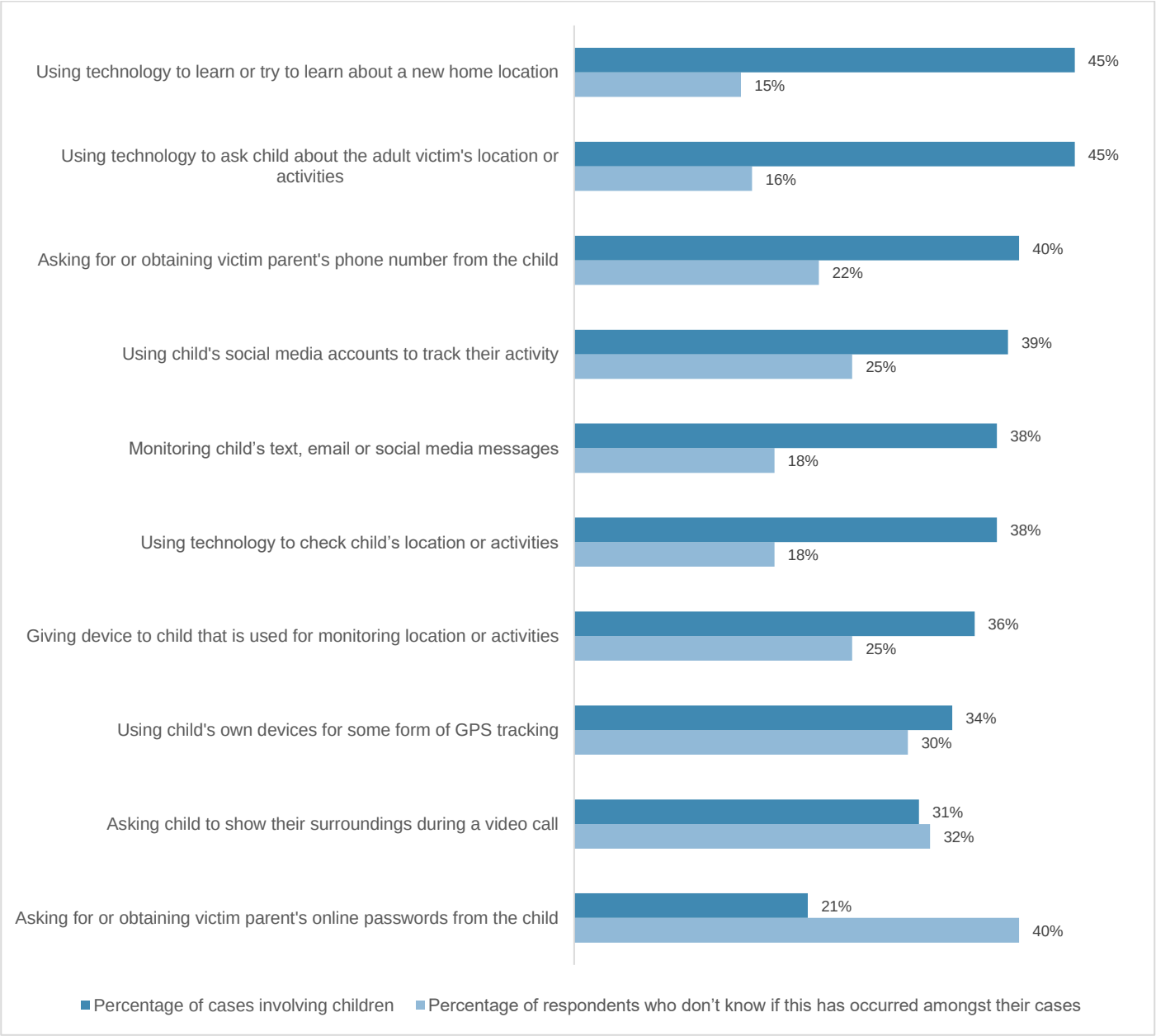
Below, we explore the patterns within each category of abusive behaviours.

1. Monitoring and stalking

Monitoring and stalking were the most common forms of technology-facilitated abuse directed at children in this research, shown in Figure 1. The most common types of monitoring or stalking behaviours were: using technology to learn or try to learn about a new home location (45%), using technology to ask a child about the adult victim's location or activities (45%), asking for or obtaining the adult victim's phone number from the child (40%) and using a child's social media accounts to track their activities (39%). Monitoring a child's text, email, or social media messages and using technology to check a child's location or activities were reported in 38% of cases. Giving a device to a child that is used for monitoring location or activities (34%) and using the child's own devices for some form of GPS tracking (34%) were reported in over a third of cases. In 31% of cases perpetrators asked the child to show their surroundings during a video call. About one-fifth of cases (21%) involved asking for, or obtaining, the victim parent's online passwords from the child.

[3] To simplify this assessment, participants were asked to select one of the following responses: 'none,' '1' or 2,' '25%,' '50%,' '75%,'100% or almost 100%,' or 'unsure or don't know.' For each behaviour, each participant's response was converted to a number (based on the initial number of domestic and family violence cases they reported handling in the past 12 months before being divided by the total number of cases reported across all participants). We then added all participants' frequencies to calculate an overall percentage out of the total number of cases across all participants. For example, if a participant reported handling 500 cases in the past 12 months, of which 50% involved changing the other parent's passwords, we would convert this response to 250 cases. This would then be added with all other participants' estimates, and then the percentage of the total number of cases reported across all participants.

Figure 1. Proportion of domestic and family violence cases involving technology-facilitated monitoring or stalking affecting children



A number of professionals recounted children's involvement in stalking their mothers, monitoring their activities and identifying locations. The resulting information about physical location was used by the perpetrator to engage in physical assaults. Technology-facilitated stalking also frequently resulted in the need for the family to relocate. In the open-ended questions, many professionals reported how perpetrators used Facebook or FaceTime calls to gather visual and audio information about their former partner's new location and activities. For example:

- Father found the child's Facebook page and found images of the child in school uniform. Father turned up at school attempting to take child. Mother was forced to flee home again.
- The perpetrator continued perpetration through phone calls, FaceTime and questions about location and what the mother is doing, playing a 'victim' role with the child.

- Mother and children were in a refuge. Father used child's posts on Facebook to find their location when one of the children used ‘check in’. Stalked them then attacked the mother.
- Father used spyware on an iPad and a car tracker to monitor movements of children and their mother in an isolated rural area.

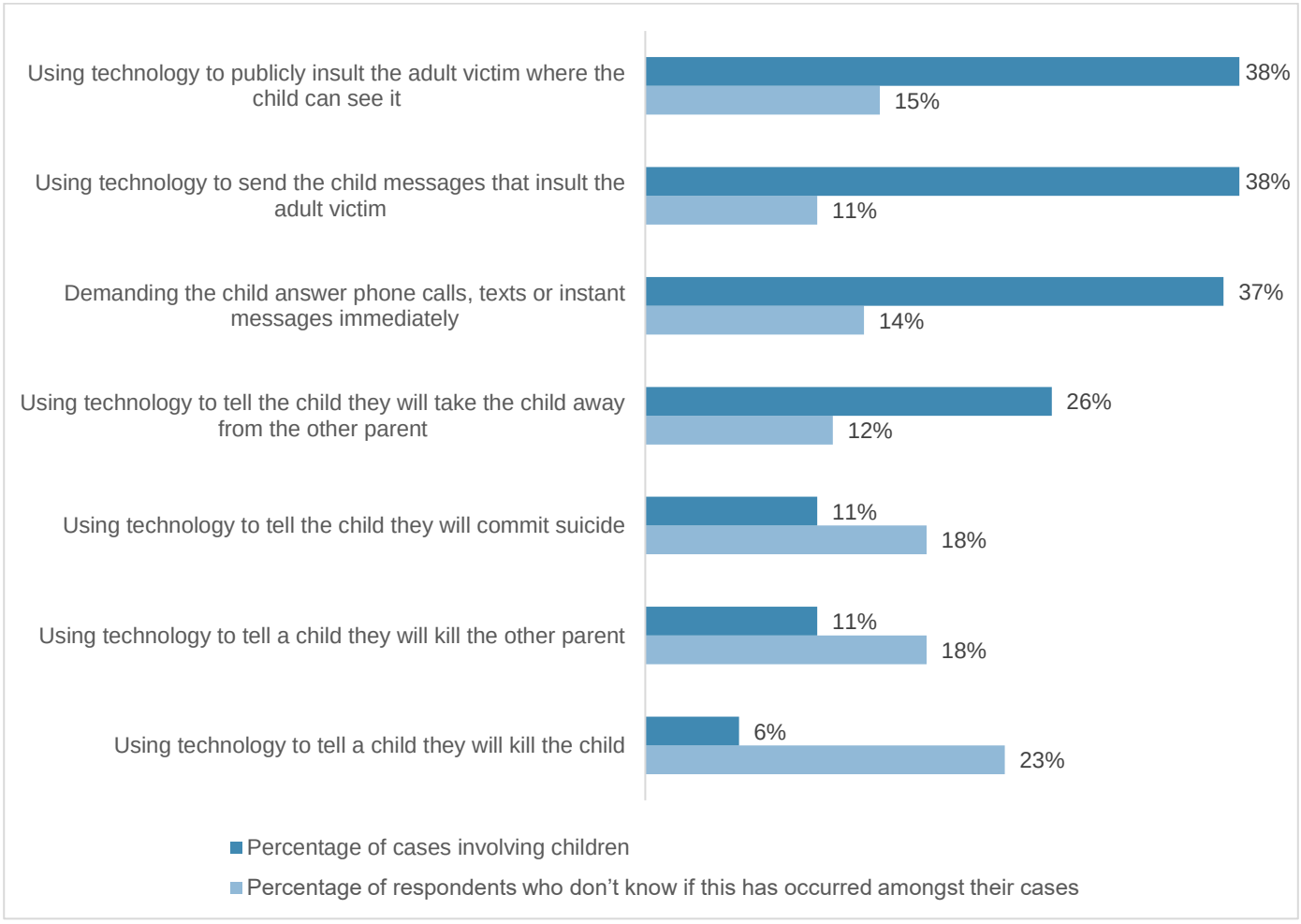
Survey participants also noted ways perpetrators use technology to abuse children that were not included in our list of behaviours. For example:

- Perpetrator texted child to obtain information while mother was at court obtaining a DVO. The child felt pressured and provided what information he heard and shared surroundings to evidence whereabouts and DVO information.
- An ex-partner used a drone and spyware in combination with physical stalking to monitor the movements of a mother and child in a small community. This followed the couple's separation and allegations that the ex-partner had sexually abused the child.

2. Threats and intimidation

Figure 2 shows the proportion of technology-facilitated abuse cases involving a child that included threats. In more than a third of cases, the following were present: using technology to publicly insult the adult victim where the child can see it (38%), using technology to send the child messages that insult the adult victim (38%), and demanding that a child answer calls, texts or messages immediately (37%). Participants also reported that around a quarter of cases involved the use of technology to tell the child they will take the child away from the other parent (26%). Using technology to tell a child they will kill the other parent (11%) or kill themselves (11%), directly insult the child publicly (7%), or tell the child they will kill the child (6%) were less commonly reported.

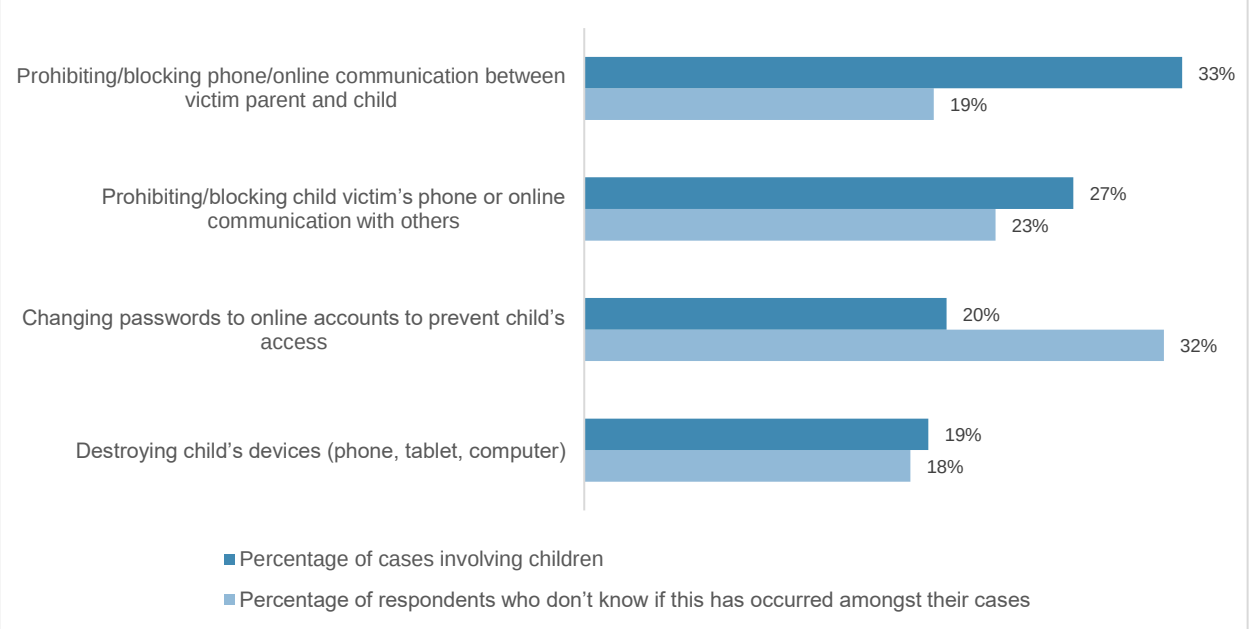
Figure 2. Proportion of domestic and family violence cases involving threats and intimidation of children



3. Blocking children's communication

Figure 3 shows the proportion of cases involving behaviours that blocked children's communication. The most commonly reported was prohibiting/blocking phone/online communication between an adult victim and child, which was present in a third of cases (33%). Prohibiting/blocking children's phone/online communication with others was reported in over a quarter of cases (27%). Changing passwords to online accounts to prevent children's access was reported in one-fifth of cases (20%).

Figure 3. Proportion of domestic and family violence cases involving blocking children's communication



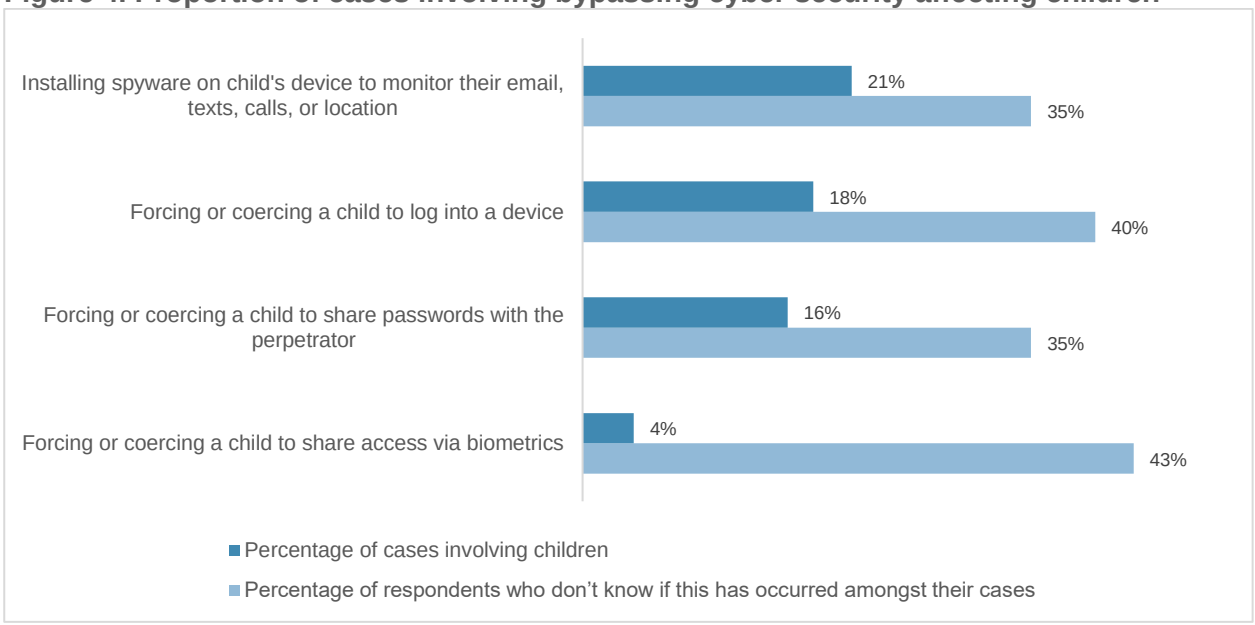
The open-ended survey responses included examples of perpetrators preventing communication between children and their support networks, such as:

- A father who removed his 13 year old daughter's phone when she went to his house so she [couldn't] talk to her mum. He also key locked the doors.
- Taking phones from children when they are with the perpetrator. Denying children access to talk to their mother when with the perpetrator. Cutting off the internet.

4. Bypassing cyber security affecting children

Bypassing cyber security was the next most frequently reported type of technology-facilitated abuse directed at children. Figure 4 presents these behaviours. Professionals reported that installing spyware on a child's device occurred in 21% of domestic and family violence cases. Forcing or coercing a child to log into a device was reported in 18% of cases while forcing or coercing a child to share passwords with the perpetrator was reported in 16% of cases. Forcing or coercing a child to share access via biometrics (e.g. where a perpetrator compels the child to unlock a device using their thumb print) was seen in only 4% of cases. Over one third of participants didn't know if these types of abusive behaviours had occurred in their domestic and family violence cases.

Figure 4. Proportion of cases involving bypassing cyber security affecting children

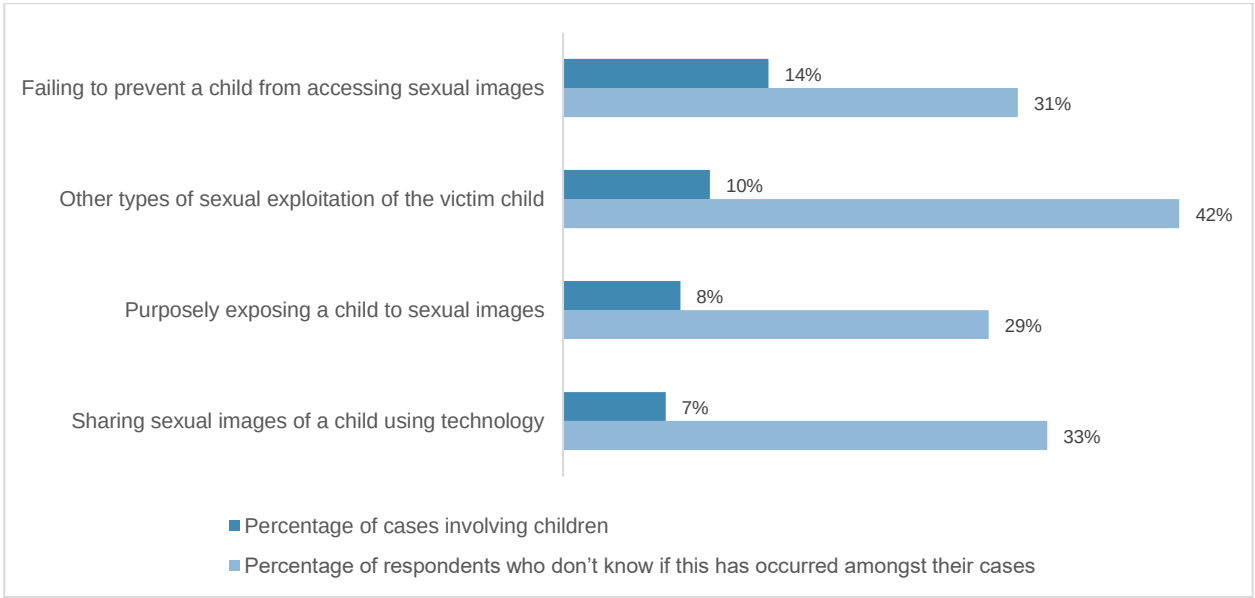


Perpetrators often used children's devices to bypass cyber security measures. Responses to the open-ended survey items most often mentioned turning on GPS and location tracking in children's devices. It may be that this is understood as 'spyware' by professionals.

5. Sexual abuse

The survey included questions about sexual abuse. As seen in Figure 5, professionals reported that 14% of domestic and family violence cases included failing to prevent a child from accessing sexual images, while 8% of cases involved purposely exposing a child to sexual images. In 7% of cases technology was used to share sexual images with child and in 10% of cases the child experienced other types of sexual exploitation.

Figure 5. Proportion of domestic and family violence cases involving sexual abuse of children



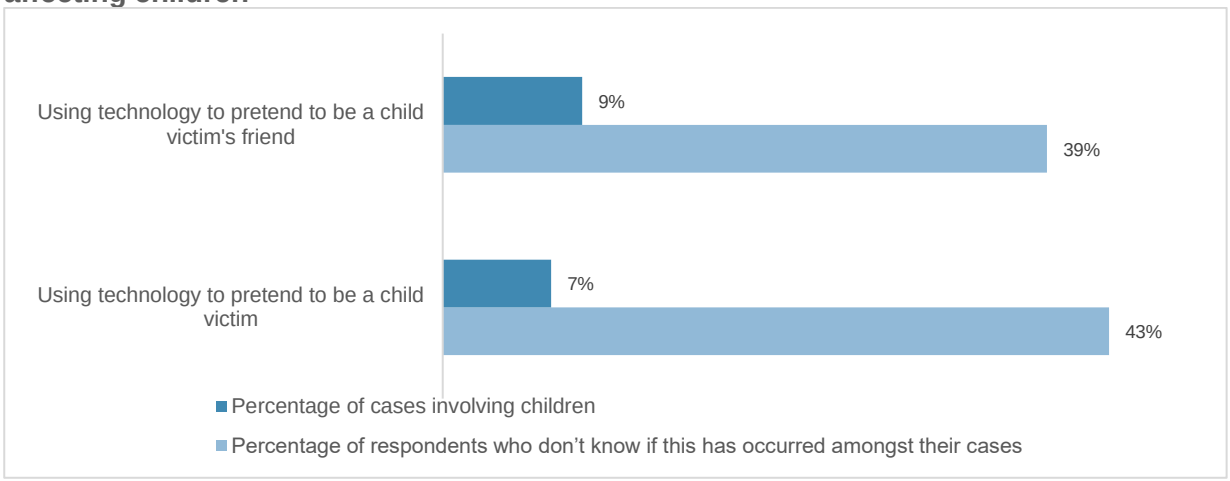
The open-ended survey responses included several examples of sexual abuse and neglect involving children and technology that can help us understand these statistics. For example:

- A 5 year old child sitting on dad's lap while he exchanged sexual images with a female.
- Technology used to create child exploitation material which was then sold along with the promise that the buyercould meet the child in the material. Also technology being used to sell the child's sexual services (pimping) to other offenders.
- Parent exposing child to sexual content through a smartphone.

6. Impersonation

Perpetrators using technology to pretend to be someone else was less commonly reported in our survey than threats and blocking communication. As Figure 6 shows, only 9% of cases involved using technology to pretend to be a child's friend and 7% of cases involved using technology to pretend to be a child victim.

Figure 6. Proportion of domestic and family violence cases involving impersonation affecting children



Participants also provided examples of impersonation in the open-ended survey question responses. Some perpetrators impersonated their children and some impersonated other children. In one example from the open-ended questions, a perpetrator attempted to make up evidence that could be used to make an adult victim look bad.

- One perpetrator set up an account in the name of the child then used it to view pornography. He then claimed that the mother was allowing the child to do this as part of his custody battle.

Another perpetrator impersonated a child online to communicate with his children without them knowing who he was:

- Child had access to gaming, and so did the father, the father pretended to be a [young] boy, the child assumed he was playing a game against his friend (which dad knew and made up) dad

> used the gaming time as a space to ask the child questions … to find out when mum was going to be alone in the house, the child thought all was innocent and answered, dad got the info, when mum was alone, he went over to her house, beat her up and left her very wounded.

7. Other types of technology-facilitated abuse

The open-ended survey questions provided additional information about how perpetrators target children. Many professionals reported that, post-separation, abusive men used technology-facilitated communication with children to manipulate them, their mothers and legal systems. For example:

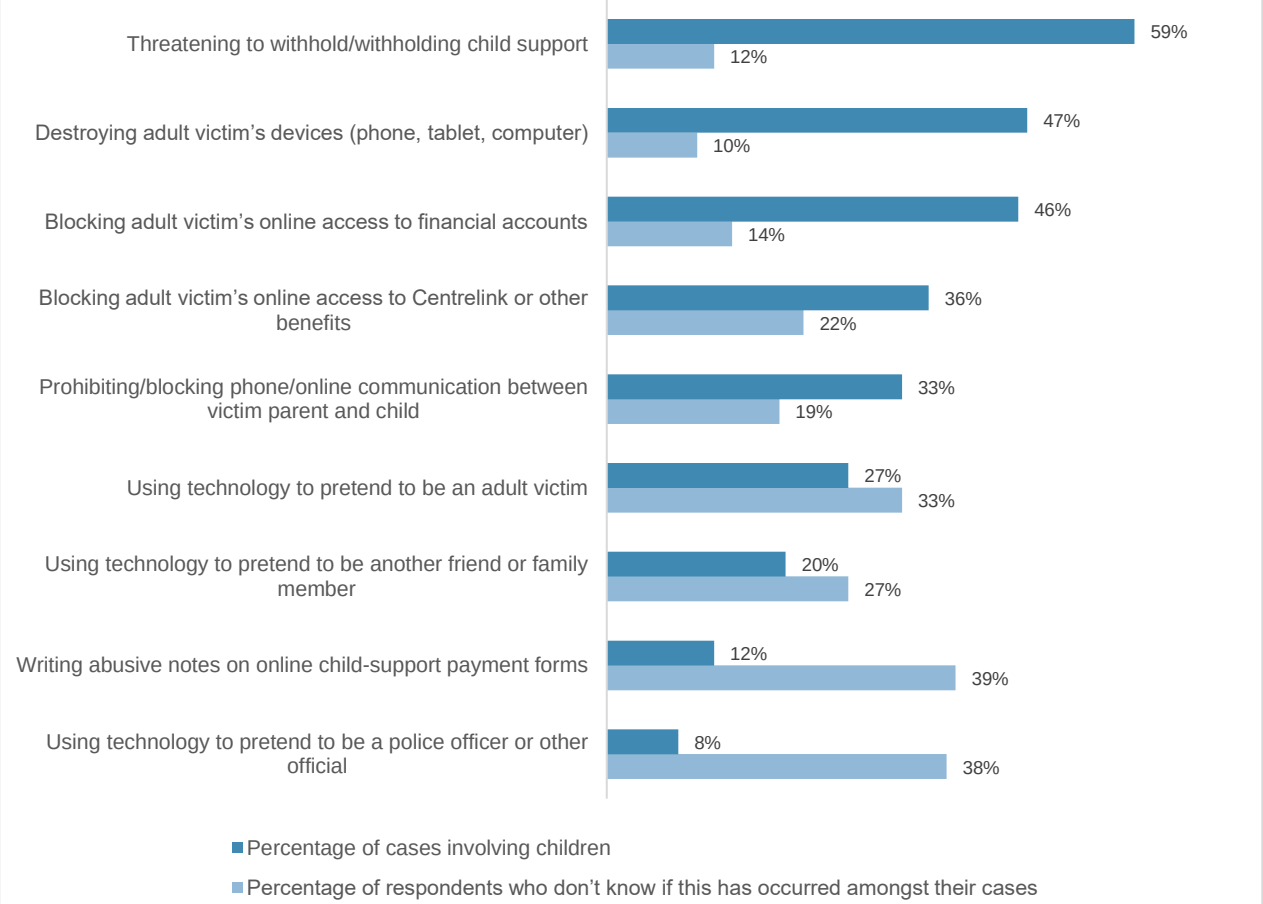
- The perpetrator would also send video messages to the children where he would be crying, saying how sad he was and how much he missed them, and also other videos where he would tell the children about exciting or fun events that they had missed out on because they weren't with him. He would also often say things in videos, FaceTime or texts like, ‘you will be with daddy very soon,’ or ‘you are not safe without daddy.’

- Sent emails and messages to the victim’s family both here and overseas making false accusations about the victim … very damaging to her and result in strong feelings of isolation in her community.

8. Co-occurring abuse

Previous research emphasised the importance of the domestic and family violence context in understanding technology-facilitated abuse (Dragiewicz et al., 2019). So this study included questions about other forms of non-physical abuse that co-occurred alongside the technology-facilitated abuse of children in domestic and family violence. Questions about co-occurring abuse looked at abuse directed at adult victims as well as other forms of abuse affecting children that may not have involved technology. Figure 7 shows the prevalence of co-occurring forms of abuse.

Figure 7. Co-occurring abuse



1. Co-occurring financial abuse

Financial abuse directed at adult victims was the most commonly reported type of co-occurring abuse in this research. This type of abuse affects children indirectly. Survey participants reported that 59% of domestic and family violence cases over the 12 months included threatening to withhold or withholding child support, and 46% of cases included blocking adult victims' online access to financial accounts. In 36% of cases, perpetrators blocked adult victims' online access to Centrelink or other benefits. Writing abusive notes on online child support payment forms was present in 12% of cases.

Examples of financial abuse directed at adult victims from the open-ended survey questions included: transferring money out of bank accounts, blocking access to funds, using bank transactions to stalk, interference with mortgages and taking out loans in an adult survivor's name. For example:

- Tracking ATM and EFTPOS use.
- Father tracked the mother via spyware, changed her passwords on her online accounts so she couldn't access them for help, bank account passwords were changed, father had all the financial access due to immigration status.

- A perpetrator with IT skills opened accounts in the victim's name and also applied for loans.

2. Co-occurring blocking of parental communication

Activities that interfered with parental communication were the next most common type of co-occurring abuse. Destroying adult victim's devices (phone, tablet, computer) was reported in 47% of cases, while prohibiting or blocking phone or online communication between the victim parent and child was present in 33% of cases.

3. Co-occurring impersonation

Impersonation, or pretending to be someone else, was the next most common form of co-occurring abuse. Professionals reported that pretending to be an adult victim occurred in more than a quarter of domestic and family violence cases (27%) and using technology to impersonate a friend or family member occurred in one-fifth of cases (20%). Using technology to pretend to be a police officer or other official was less commonly reported (8%). Impersonation was sometimes used to enable the harassment of adult victims by third parties, to humiliate them, or to manufacture content that appeared to be created by the victim to make them look bad. For example:

- He had access to everything on her phone though spyware and he downloaded intimate pictures which he uploaded to the web, setting up a sex work profile in her name, providing her phone number and address.
- [He] created fake photos and uploaded them to porn sites.
- Set up fake online dating profiles of the victim using photos and sharing information as the victim.
- Perpetrator created fake profiles on social media of the victim and posted violent content.

4. Co-occurring threats

Open-ended research questions provided evidence of threats and intimidation which were directed primarily at parents (women) who were victims, though sometimes also at children. For example:

- Perpetrator posted photos of locations within 100m of victim's house on Facebook, while increasing SMS threats to come to the house and kill the victim and her children.
- Photograph of the [young] child and the father, naked from the waist up, with the father holding the child in one arm and a rifle in the other, posted on father's Facebook. Intended to terrify the mother/threaten her/intimidate her.
- Perpetrator used mobile phone text messages to threaten murder/suicide.

Unique dynamics of technology-facilitated abuse in underserved communities

The open-ended survey questions and focus groups provided information about additional challenges for underserved communities (a community that faces barriers in accessing and using victim services and includes populations that are underserved because of language barriers, economic limitations, disabilities or geographic location) including Aboriginal and Torres Strait Islander communities, Culturally and Linguistically Diverse (CALD) communities, disabled women, and those in rural and remote areas.

1. Aboriginal and Torres Strait Islander communities

In the open-ended survey questions, professionals noted that mobile phone sharing was an issue in Aboriginal communities. For example:

- Often the perpetrator has the only phone and monitors calls and texts, does not pass on messages.
- Abusive texts and taking partner's phone etc.

Social media services were seen to play an important role in conflict and abuse in remote locations and small Aboriginal communities, involved in family and community conflict, peer-to-peer bullying and child sexual abuse. The lack of law enforcement and services in remote areas were noted as exacerbating these problems. Historical trauma and long histories of child removal meant some families were less likely to seek help from formal systems (e.g. legal). This response provides an example:

- Growing trend to use social media services networks to shame, abuse and share intimate images of children/child abuse material. In particular platform 'Diva chat'.

In addition, social norms around family sharing may make it even more difficult for Aboriginal women to use conventional cybersecurity measures, which are designed for independent user cultures wherein individuals control and own devices and are advised to protect their privacy by not sharing. One respondent noted:

- Aboriginal and Torres Strait Islander women are under constant pressure to respond to family demands.

These examples support previous research on cybersecurity in urban Aboriginal communities (eSafety, 2019a) which found that abusive calls and texts, restricting technology access, destroying devices, networked abuse via social media services, monitoring, image-based abuse and fight videos were most commonly reported by professionals in the domestic violence sector. Prior research on cybersecurity in remote Aboriginal communities also documented how community social norms can affect device use in ways that compromise conventional cybersecurity measures, the involvement of social networks in online abuse and the amplification of conflict via social media services (Rennie et al., 2018).

2. Culturally and linguistically diverse communities

The open-ended items in this research also provided examples of challenges for culturally and linguistically diverse (CALD) women which centred on language barriers. Professionals provided many examples about how language was a barrier to service delivery, with adult victims thought to be constrained and isolated in Australia through their limited English language skills. At the same time, support services, such as front-line domestic violence services, didn't always offer adequate translation services. The open-ended survey responses provided examples:

- Without devices, CALD families can be extremely socially isolated within the Australian community. I am aware of some scenarios where the mother has very limited English and the father restricts her access to a phone, the internet, and to education as a form of control and to isolate the victim.

- The abuse is everywhere, not just in these groups. The abuse can be harder to monitor because of the language barriers – hard for an English-speaking worker to know what a text message/ Facebook post says when it's in another language. Cultural practices can be abused to control people

- There can be problems in ensuring that the problematic communications can be translated in a timely and accurate way.

Limited rights and resources in Australia, limited knowledge about rights in Australia, and precarious immigration status created additional problems. These were emphasised in the following:

- CALD clients [are] not being sure of the laws in the country, when [the] perpetrator abuses them through technology they often feel powerless to protect themselves. Perpetrator often tells them (if in a refuge) that they will end up back with them being abused because Australia does not care about women or CALD persons.

- There is an international dynamic at play where newly arrived migrants on insecure visas may have a number of situations that can complicate their use of social media in particular: threats posed to their families in home countries by the abuser (if from same country; need for 'proof of relationship' in order to access the [domestic and family violence] provisions under immigration; pressure from families in home countries for the relationship to be successful given their role in either honouring the family, justifying the expense of their coming to Australia or not wanting their families to know about the abuse; social media is the medium through which these things are often communicated or deliberately miscommunicated by the victim in order to uphold dignity and safety.

- Using technology to create fear of not being able to get permanent residency or making women feel that they have no rights due to their status.

Women born overseas may be exceptionally dependent on mobile phones for contact with families and support networks. Being separated from family and friends back home makes it even less likely that changing numbers or accounts is a viable protective measure for immigrant women. This was shown in some of the responses:

- For many of these people, this is the only way that they are able to stay connected with their families, they do not realise that they can be tracked via their phones or smart tablets. For them to find out that they need to use a safe phone, can no longer post on social media, need to turn off GPS and location finders it leads to further isolation.

- CALD clients rely [on] and use the phone all the time so [are] reluctant to change or alter any settings or change sim cards. Quite often relatives overseas know their number too so they are fearful of losing contact with their friends/community back home.

- Many women from CALD groups rely heavily on their phones as a means of communicating with their loved ones in their country of origin and as a translation device (if they don't speak English). If actively in the relationship and residing together, the perpetrator may hide or destroy her phone or stop paying the bill which means she can't contact anyone.

Professionals noted that messages to family in women's country of origin can be used to humiliate and punish women. For example:

- Using social media platforms to publicly shame women and girls … has a huge impact on their standing/reputation/relationships in the community and with their family. It is feared that it will impact their ability to find a partner and get married and it also brings shame to the whole family, not just the individual.

- Messages and images [are] sent to family back home in an attempt to humiliate and get revenge.

These examples reinforce key themes found in recent research on women and technology safety for CALD women (eSafety, 2019c) which reported English language ability and difficulties with translation as well as limited information about rights and resources, and feelings of shame were barriers to getting help.

3. Women with disability

The research showed that adult victims with physical or mental disabilities face additional challenges. Physical and social isolation can make it impossible for adult victims with disabilities to stop using technology. For example:

- Sometimes the nature of their disability can make them more reliant on their devices and often they are more isolated and less likely to want to give up their devices.

Perpetrators may target women with disabilities because of their perceived vulnerabilities. As one participant explained:

- Clients … tend to be targeted as a result of their disability. From my … reports, the perpetrators have a belief [those with a disability] are more helpless and dependent on them and will not relent their tech-facilitated abuse.

Relying on technology for daily assistance can entrap disabled women in relationships and make blocking access to technology even more harmful. These comments from the open-ended survey questions explain the dynamics:

- Technology can be withheld from these groups particularly disability and CALD clients. Those with disabilities have other fears such as being alone and needing the abusive person to support them. Sometimes a client cannot walk or reach to get a device that has been taken from them or they are coerced into being obedient to stay in the country or have support/threatened. Fear and threats are used to control these groups.

- Some people with disabilities rely on technology for communication requiring specific devices or software. Perpetrators may threaten to take or actually take their means to get help or communicate with others.

- For people with physical disabilities technology is often the only gateway they have to contact … others including support/emergency services, information/ knowledge, banking, grocery shopping, news, entertainment etc. By restricting access to this power and control is maintained – victims can't report abuse, can't receive medical treatment and assistance and secrets (abuse) is protected.

Adult victims with cognitive disabilities may also be vulnerable to cyber security and privacy risks.

- Generally my experience has been with people with [autism spectrum disorder] and/or intellectual impairment who have been less conscious about security and privacy settings and so much more vulnerable to be manipulated.

These examples add to the limited knowledge of technology and domestic and family violence against women with disabilities in Australia. Researchers in Australia have demonstrated how women with disabilities experience more and different forms of domestic violence (Harpur & Douglas, 2014). They have reviewed the literature on specific forms of abuse made worse by disability (Frawley et al., 2015) and studied ways to improve service provision to women with disabilities by offering services that are approachable, appropriate, affordable and available (Dyson et al., 2017; Frawley et al., 2015). However, research with disabled domestic and family violence survivors is still needed to understand the role of technology. As the above quotes show, future research should address a broader range of technologies and cyber crimes, as well as the structural factors that mean disabled women are more vulnerable to abuse. Similar suggestions were made earlier by Grant (2017) who advocated more collaborative research and practice with women's disability rights groups.

4. Rural/remote areas

Adult victims in rural and remote areas also experience challenges dealing with technology-facilitated abuse. Professionals reported that access to mobile phones and other basic technology was an issue for women in these areas. Privacy concerns were raised repeatedly. Geographic isolation and lack of services were difficult for those experiencing technology-facilitated abuse and the lack of affordable access to basic communication technology and service was also noted as a problem.

Those in rural and remote areas suffer from a lack of privacy and community norms to keep quiet about abuse make disclosure and help-seeking riskier and less likely. For example:

- They … live in tight knit communities where they have lived all their lives and everyone knows everyone. It is easy to use social media sites to turn communities against people. It also makes it difficult for people to disclose abuse due to concerns that they risk losing what support they do have.

- Difficult to change details as it is usually a small community and the community will know where the person has moved to and their contact details and likely will give it to the perpetrator as they are likely unaware there is any [domestic and family violence] within the family. Limited access to support services and due to location and small community abuser is usually aware of when the victim has attended a service.

According to research participants, the lack of basic social services and domestic violence specialist services in rural and remote areas mean women have less access to help and makes them more dependent on technology to access information and services. Research quotes illustrate this point:

- Women rely on technology to access Telehealth and other services, leaving them vulnerable to abuse including restricting access and a lack of privacy.

- They have less access to [domestic violence] services who can provide the education around technology abuse. Many clients I have worked with limit their understanding of [domestic violence] to physical abuse.

- We do not have a Centrelink agency so all transactions are completed online. Perpetrators often have taken over the access to all payments Centrelink and banks.

The examples align with previous research noting that despite higher rates of reported domestic and family violence in rural areas, services are often inadequate or difficult to access (Campo & Tayton, 2015; George & Harris, 2014).

Technologies involved in abuse

Figure 8 shows professionals' estimates of how often specific devices were used in technology-facilitated abuse involving children in domestic and family violence. Mobile

phones were the most common (79%) followed by computers/laptops/tablets (64%). Drones (9%) and fitness trackers (9%) were least frequently reported.

Figure 8. Devices used in technology-facilitated abuse cases affecting children

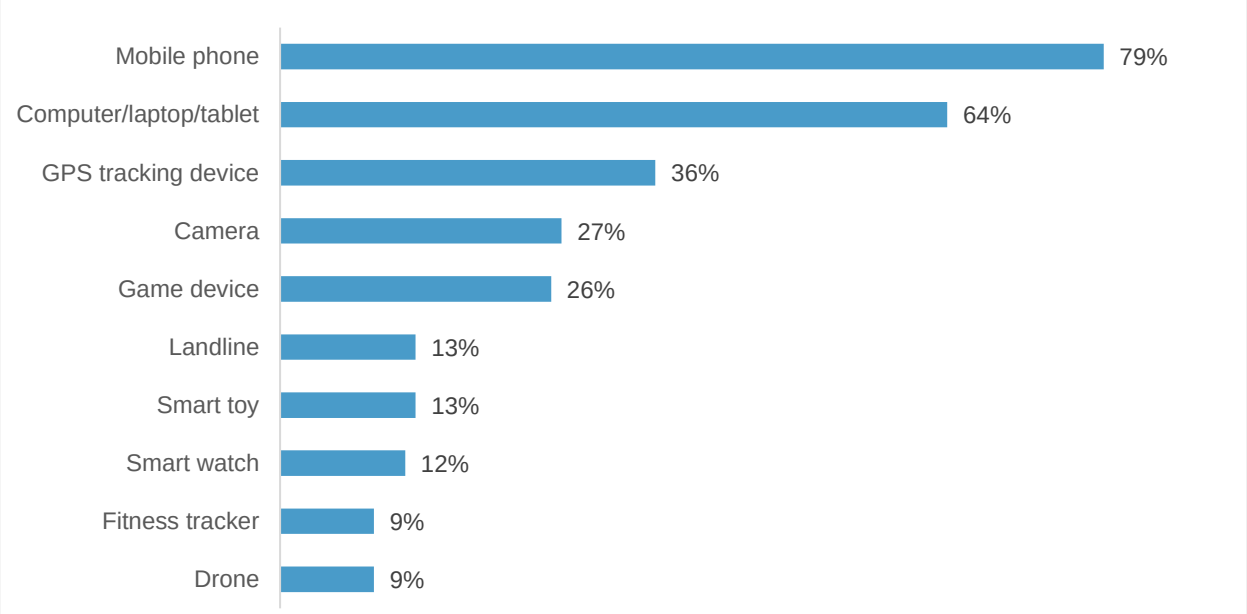
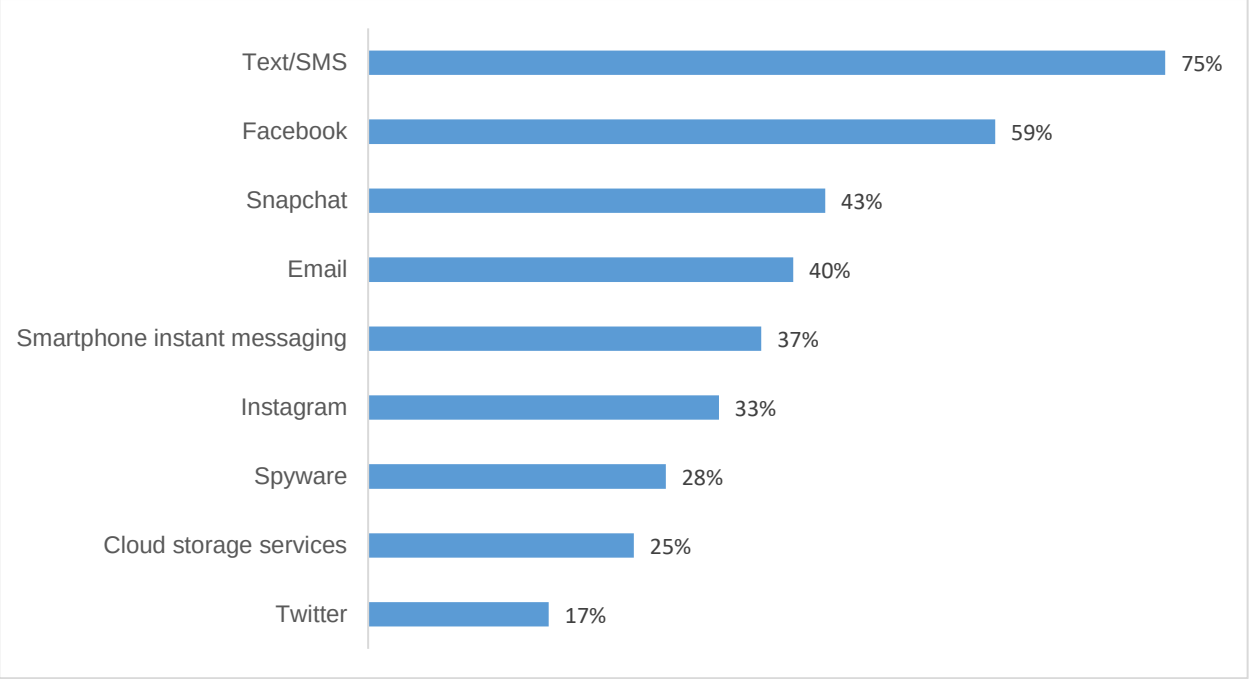


Figure 9 shows the platforms or services used in technology-facilitated abuse cases involving children. Participants reported that the most common platform for abuse in the cases they knew about was text/SMS messages (75%). This is not surprising, given that mobile phones were the most common device used. The focus groups with professionals also noted that mobile phones are increasingly becoming people's primary devices.

Abuse using Facebook was present in 59% of cases, while other platforms like Snapchat (43%), email (40%) and smartphone instant messaging (37%) were present in more than a third of cases. Instagram was used in a third of (33%) of cases. While it wasn't among the most common platforms used in technology-facilitated abuse, professionals reported that spyware was used in more than a quarter of technology-facilitated abuse cases involving children (28%). Abuse involving cloud storage was reported in 25% of cases. Abuse using Twitter was least often reported (17%).

To offer greater clarity, future research could tease out what professionals mean by spyware, for example by asking whether they were referring to specific spyware applications or misuse of other applications with legitimate uses.

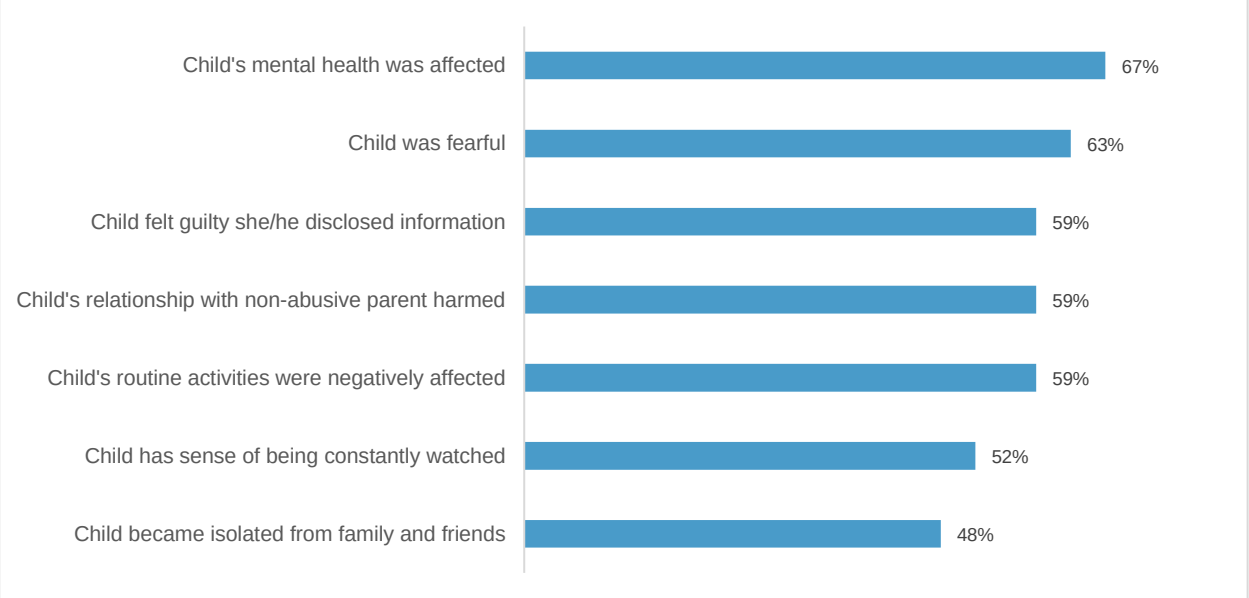
Figure 9. Platforms used in technology-facilitated abuse affecting children



Impact of technology-facilitated abuse on children

Figure 10 shows professionals' estimates of a range of negative impacts technology-facilitated abuse had on children. Participants reported negative effects in most cases. Children's mental health was affected in two-thirds of cases (67%), the child was fearful in 63% of cases, the child felt guilty they had disclosed information in 59% of cases, the child's relationship with the non-abusive parent was harmed in 59% of cases and the child's routine activities were negatively affected in 59% of cases. Isolation from family and friends was the least commonly reported effect, although it still occurred in almost half (48%) of cases. These numbers indicate that technology-facilitated abuse has a wide range of negative effects on children, and these are common.

Figure 10. Impact of technology-facilitated abuse on children



Practitioner participants in our focus groups also reported a wide range of serious negative effects on children from technology-facilitated abuse. According to their accounts, children experienced anxiety about contact with perpetrators, guilt about revealing information to perpetrators, shame about being manipulated into participating in the abuse, as well as observed disruption in their relationship with their non-abusive parent. The open-ended survey responses provided details. For example:

- All [of the] children were significantly impacted by the abuse. The oldest child was the easiest to quantify – he suffers from anxiety and depression, he was fearful every time he was required to talk with or visit his father (court-ordered contact). His behaviour often regressed to toddler-like behaviour, especially around contact with his father. He had angry outbursts at times.

- Significant impact on the child's mental wellbeing (thoughts of suicide), high levels [of] school absenteeism, and disrupted attachment relationship, specifically when mum attempted to implement boundaries child would respond by telling mum that she would call dad (perpetrator) to come to the house.

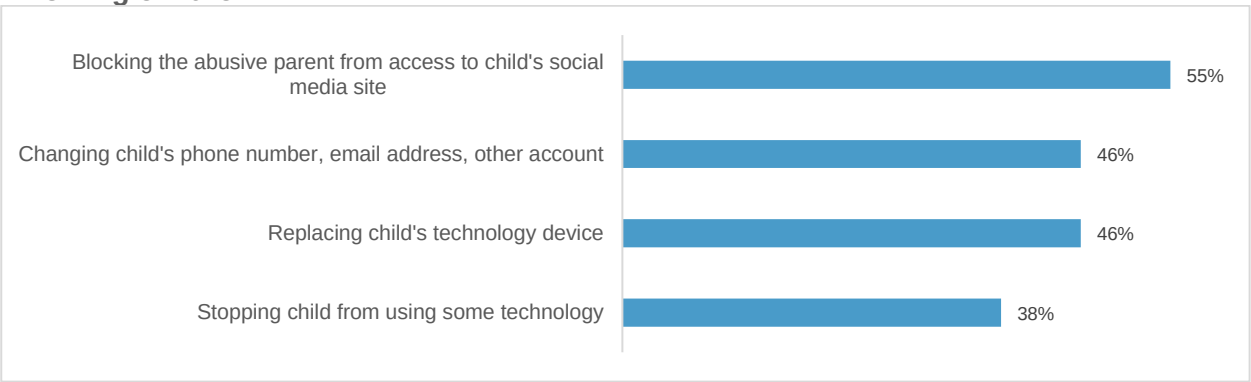
- They had to move to another state and the children were prohibited from using any devices. They became socially isolated at school as they could not keep up with the news after hours. Children became withdrawn. Mother tried not to be cross with kids but deep down blamed them as she had told them not to tell dad where they were.

Professionals in focus groups and in response to open-ended survey questions also noted that young children were often confused by ongoing abusive and manipulative communication during post-separation parenting.

Strategies used by adult victims to reduce technology-facilitated abuse of children

Professionals were asked to estimate how often adult victims used particular strategies to reduce abuse against children. These results are presented in Figure 11. In more than half the cases, the adult victim blocked the abusive parent's access to a child's social media site (55%). Changing a child's phone number, email address or other account was reported in 46% of cases, and in 46% of cases the adult replaced a child's technology device. Stopping a child from using some technology occurred in 38% of cases.

Figure 11. Strategies used by adult victims to reduce technology-facilitated abuse involving children



The behaviours in Figure 11 illustrate how identical technology-related behaviours can be used by perpetrators to engage in abuse and for protection by professionals, adult victims and children.

The open-ended questions provided additional detail about strategies professionals saw as effective in protecting children. These are summarised below.

1. Education and communication

The most common response to the open-ended survey question about effective strategies for preventing and responding to technology-facilitated abuse involving children was to suggest education and communication. Professionals recommended education for adult victims and children to increase user-knowledge about device and application settings and capabilities. For example:

- Student awareness … making it class discussion is brilliant as it empowers the students, as most parents now say oh everyone has a smartphone, I don't want my child to feel left out, but it's like giving the kids a gun and no instructions how to use [it].

Professionals stressed the importance of acknowledging the abuse and talking about it with children. For example:

- Age-appropriate honesty (e.g. not minimising or colluding with the perpetrator by trying to pretend it's not really abuse, 'Daddy didn't mean it,' or 'Daddy is feeling sick,' etc).
- Explaining to the child in an age and stage-appropriate way that the offending parent shouldn't be contacting them on the device. This is difficult however when parenting orders or the IVO [Intervention orders] allows for contact with the child and family violence is still being perpetrated during this contact.

Some professionals reported that they had previously lacked knowledge about technology-facilitated abuse in domestic and family violence, so training was important to them.

- I have only become aware of technology-facilitated abuse in the last week, after a social worker colleague attended a training day. I have never heard of it before, and feel it is so important.

- I was completely naïve about the extent to which tech-facilitated abuse occurs and the different types of tech-facilitated abuse until I attended a 2 hour training course with the eSafety Commissioner's office. I knew that perpetrators would harass victims using phones and sites like Facebook, but it is so common that it seemed less important than other types of abuse. I also had no idea what to do about it. The training was vital for me.

2. Changing devices or settings

Professionals recommended changing application and device settings or replacing devices, including:

- purchasing new devices or having several devices (e.g. a phone that the perpetrator is aware of and another that he is not).

- providing new mobile phone for victim, suggesting the victim change passwords to all applications such as Facebook and emails.

- resetting device settings with ‘factory reset’.

3. Reporting

Many professionals indicated that reporting technology-facilitated abuse to police, courts, or child protection could be an effective strategy. Domestic violence orders (DVOs), intervention orders (IVO) and family violence orders (FVO) were useful in addressing technology-facilitated abuse. Professionals recommended using technological evidence, such as texts and emails, to support requests for new orders and to assist in reporting breaches of existing orders. Some examples include:

- Seeking IVOs with conditions that the perpetrator is not to use technology to perpetrate violence, ensuring that children are listed on the IVO. Supporting non-offending parents to report breaches of IVOs.

- If there is a family law case, to let the lawyers know so that it can be addressed as part of the family law case.

- Taking phone evidence and seeking police assistance.

4. Parental monitoring of children’s communication

Many professionals recommended that non-abusive parents closely monitor children’s technology usage, such as:

- The parents taking responsibility, and taking … pressure off, the children.

- Monitoring all usage and apps etc.

- Children … not [being] allowed to access … phones unless authorised by parents.

5. Limiting children's use of technology

Some professionals advised limiting children's access to technology to protect them, emphasising:

- Removing the technology that the abuser has to access the child.
- Turning off the home modem after a set time and ensuring children use technology appropriately [with supervision from] the non-offending parent. Making children leave their phones outside their bedroom at nighttime.
- Restricting … access to technology.

Previous research has found that parents' approach to monitoring their children's online communication differs according to the child's age. Parents of younger children report more restrictive approaches to monitoring their safety online than parents of older children (eSafety, 2019b). In this study, parents told us about protecting young children by limiting access to technology and monitoring their communication. However, they were worried about their ability to do so once children get older.

6. Blocking numbers and accounts

Blocking numbers and accounts was also highly recommended in the open-ended survey question responses. Responses included:

- Blocking the perpetrator so they do not have access to the child.
- Blocking perpetrators on social media, blocking their phone number.
- Blocking and switching off technology if it is safe to do so.

However, professionals noted that post-separation parenting arrangements often precluded blocking perpetrators. These examples illustrate these dynamics:

- I often see examples of family violence where the adult victim is attempting to facilitate phone or FaceTime contact between the [child] and the perpetrator and the child is exposed to abusive behaviours directed towards the adult victim during the call. Perpetrators use their right to have contact with the child – or the adult victim's willingness to allow the perpetrator to have time with the child – to continue a relationship, to ask inappropriate questions or make comments about the adult victim to the child and put the child in a difficult position between the parents. Often perpetrators also become abusive or make threats when there has been [a] delay in facilitating or taking a phone call/FaceTime between them and the [child].
- It is difficult to stop a child and a parent (who is a perpetrator) from communicating through technology when that would be used against a victim in Family Court. A perpetrator would tell the court that the victim is not facilitating contact by blocking contact through technology.

7. Empowering victims

Empowering victims to seek support, limit or end communication with perpetrators and discuss the abuse openly with supportive people was another important protective strategy. Safety planning with children was one part of this process. The open-ended survey questions provide detail about recommended options:

- Safety planning, granting permission [to the child] to block or put in boundaries with the perpetrator.
- Enhancing their power, by highlighting choice in their activities, and informing [them about] ways to protect themselves (e.g. the eSafety website). Encouraging and supporting open communication and not holding secrets, matched by ensuring that they are protected, not further victimised by the abusive parent. Children in these situations [are often attuned] to the situation and if this can be affirmed in words in a balanced non-judgemental way, they can often feel [better] and understood … enhancing their own sense of safety.
- Offering skills to understand why the parent is behaving that way. Ensuring the young person knows what is decent and not decent so they are empowered to recognise what abuse is and how to call it out ... The more the young person feels like they can express what they actually know and that an adult is confirming that with them, [the more they will] … trust their own instinct and this is what an abuser wants to crush. … What they decide is then empowering.
- Utilising resources from the eSafety Commission website, including the technology safety checklist. We use this to help make victims as safe as possible with their technology … we also use the resources to help educate them about protecting themselves. Educating the victim about [domestic violence] in general, including the cycle of [domestic violence], what a healthy relationship looks like, how [domestic violence] impacts children and about their rights to feel and be safe.

These comments were reinforced by the interviews with children, as discussed below.

8. Screening

Professionals recommended screening devices, checking app settings and checking for GPS-enabled devices in toys and other items exchanged with the children, noting these approaches:

- Encouraging parents to have their and children’s tech, cars and homes screened if they have concerns.
- Having a professional search technology for spyware and providing advice on changing passwords and app privacy.
- Checking over any 'toys' that are given to the child.

9. Addressing perpetrators' behaviour

A smaller number of professionals suggested addressing perpetrators' behaviour. The open-ended survey questions provided examples:

- I try to reason with the perpetrator how this behaviour negatively affects their relationship with their child.
- Open discussions about potential perpetrators and what they are trying to achieve.

However, addressing perpetrators' behaviour may be challenging as some perpetrators are more focused on their needs than their children's wellbeing and resist taking responsibility for their abusive behaviour (Bancroft et al., 2012; Cavanagh et al., 2001; Heward-Belle, 2016; Humphreys et al., 2019). We discuss these dynamics more below in the section on interviews with abusive men.

Focus groups

The focus groups with practitioners (professionals who are domestic violence specialist staff) provided an opportunity for in-depth discussion about the nature, dynamics and impact of technology-facilitated abuse on children and adults. Focus group participants were recruited from specialised services for children exposed to domestic and family violence. Accordingly, in addition to discussing the types of abuse and harms reviewed above, the focus group participants stressed key concerns for their practice.

The practitioners in focus groups emphasised the importance of considering the broader context of technology-facilitated abuse. They highlighted that technology-facilitated abuse doesn't occur in isolation from other types of abuse. Instead, it is often part of an overall pattern of coercive control. Practitioners stressed that children are centrally involved in coercive control.

Focus group participants placed great emphasis on survivors' rights to safely use technology. They noted that mothers and children were typically responsible for managing technology-facilitated abuse rather than perpetrators facing consequences for persistent technology-facilitated abuse post-separation. Practitioners also expressed concern about a perceived double standard in the credibility afforded to women's vs men's electronic evidence of abuse.

Focus group participants noted several key challenges in responding to technology-facilitated abuse affecting children:

- Lack of staff expertise in technology, especially given rapidly evolving technologies.
- Not knowing how to effectively gather and present evidence of technology-facilitated abuse in breach of existing orders.
- Ongoing systems failure to comprehend coercive control, resulting in technology-facilitated abuse not being given the same weight as physical abuse.
- Educating and supporting children and adults without exacerbating hypervigilance.

Focus group participants also noted the significant labour involved in constantly monitoring devices, settings and children's communication with perpetrators. This safety work (Kelly, 2016) was a heavy burden for adult victims and children already suffering from traumatic experiences. The inability to truly separate from perpetrators given post-separation communication and contact impeded adult and child safety and recovery following abuse. One focus group participant said that the family law court is a 'whole new nightmare for mums' trying to separate from perpetrators and protect themselves and their children.

Accordingly, the focus group participants recommended interdisciplinary collaboration between the domestic and family violence specialist services that work with children and other related organisations in order to keep the overall context of domestic and family violence in view. The also recommended continuing education for child safety, legal, and criminal justice systems about children's place in the dynamics of coercive control. Finally, they emphasised the need to acknowledge the risks posed by the disconnect between actual domestic and family violence and ideologies that promote cooperative post-separation co-parenting.

Young people

Participants

The research team interviewed four young people about their experiences with technology-facilitated abuse in the context of domestic and family violence. Young people were recruited via services providing education and support to families who have experienced domestic and family violence. The young people were 16 to 18 years old at the time of the interview. Two lived in regional Queensland and two lived in urban locations. Two were male and two were female. One had experienced technology-facilitated abuse by her father and her ex-boyfriend, who was the father of her child. All openly discussed their fathers' abusive behaviours. Most described technology-facilitated abuse as one part of a broader pattern of abuse and neglect against themselves and their mothers. All of the young people most frequently communicated via text and preferred that to phone calls. They also all used Facebook, as well as other social media services including YouTube, Snapchat and Instagram.

Dynamics of technology-facilitated abuse

Technology-facilitated abuse was one part of young people's overall experience of domestic and family violence.

> 'To me, the use of tech against me is [part of] everything else. It's not really separated from the rest of the abuse ...' *Charlie*

The young people we interviewed had experienced physical violence, verbal abuse, controlling behaviours (including financial control) and witnessing their fathers' violence against their mothers. Some forms of abuse, including threats made via technology, were ongoing. Three of the young people were aware of domestic and family violence perpetrated by their fathers against their mothers prior to separation. The abuse had disrupted relationships between the young people and their mothers as well as their fathers. For example, one young man said he was working on rebuilding his relationship with his mother. However, he still blamed her for not protecting him from the abuse he received from his father.

> 'I couldn't actually count on support from her whatsoever. She was in a deep depression due to what was going on in the marriage. As a result, yeah, I couldn't count on anything … it actually took me … leaving the whole family behind for mum to snap out of depression and realise that her and her kids couldn't keep living like this, gave her the courage to actually … get out of the situation.' *Charlie*

Young people reported that domestic and family violence continued to make them and their families vulnerable. Young people indicated that economic vulnerability, isolation, and regular house moves had ongoing effect on their lives. Being forced to move to escape abuse disrupted social ties for families and increased their isolation. In some instances, fathers isolated the family for years. One young person described the impact of his father's longstanding restriction of his mother's technology use.

> Interviewer: Okay, so [your mum] didn't even have a phone in that time, or?

> Charlie: No, the phone she had was a crummy old thing she could only call on.
>
> Interviewer: Okay, so she was quite isolated then?
>
> Charlie: Yeah. And that's why she's allergic to tech even now, because she's not kept up with technology because of my father … That's 18 or 19 years she's had no access or no recourse to technology.

For most young people, patterns established before their parents separated framed their current experiences of technology-facilitated abuse.

1. Technologies

The young people reported primarily using phones and computers (including laptops). Participants were asked about the ownership of their devices. Three participants had bought all their devices themselves. Young people saw owning devices that they paid for themselves as a way to protect themselves.

> Elle: I bought a laptop for school and then just my phone ... I bought it for myself.
>
> Interviewer: And you're the only one with your passwords, plans, everything?
>
> Elle: Yeah … yeah. I like doing stuff that makes me feel like it's all secure.

However, in one case the young person owned their device but used a plan paid for by his father, creating complexity. Perpetrators' ownership of plans could allow ongoing control over the young person's phone. In the example below, the perpetrator had parental controls enabled on a plan he was paying for:

> 'Just when he'd get mad, he could do this thing to like block me getting messages … it's like an app or something that you can get on your phone. It's usually what you do for babies. Like little kids. But he got it for me so you can just see what's happening on that screen on your phone. And see what you're doing and stuff.' *Abby*

In another case, a father had access to the young person's mother's phone number via call and text logs available to the plan owner.

> 'My phone is PIN number secured so he can't access my phone at any stage. The only access he really has to the phone number per se is to actually allow it to keep running or to cut it off or … I know for sure he's actually got copies of my mother's phone number which she doesn't want him to have … things like that. Because with the bill that comes with the phone, he gets a copy of all the phone calls, all texts – just the numbers and contact.' *Charlie*

While this young person had bought his own phone, his father's ownership of the plan affected the his safety and that of his mother.

Young people also indicated that their fathers provided devices and plans for their younger siblings. This is consistent with the findings from our interviews with men, who

reported providing children with devices to assure post-separation contact. It is also consistent with the interviews with mothers and with professionals who reported perpetrators giving technology to children. The young people interpreted this as 'bribery' to try and manipulate their younger siblings.

2. Contact with fathers

Young people described their contact with fathers as different from their other relationships, such as those with friends, siblings or mothers. As illustrated by the example below, receiving communication from fathers was an anxiety-provoking event.

> 'It's an event. It's, 'Okay, he's texted. What has he said?' Because generally when he texts something it's quite conflicting but whether it is my mother that texted him or whether it's myself that texted him, he's not very agreeable.' *Paul*

Only one young person was having regular face to face contact with their father at the time of the interview. Two participants had blocked all forms of communication with their fathers. None were living with their fathers. All of the young people described inconsistent contact with their fathers as well as periods of abusive communication over their lifetimes.

> Interviewer: So, he's blocked on all of those [social media] accounts?
>
> Elle: Yeah. We had a little bit of a fight because it was my son's first birthday and I … sent [my dad] a photo of my son at his birthday dinner … and he was telling – I don't know if he was being serious or not, but telling me to smack him so I was like, 'It's his birthday.' I didn't say he was being naughty or anything. I had no idea. So, I was like, 'What the hell?' so I just blocked him.

Three young people did not think their father and mother had any contact and only one described direct communication between his father and mother. Fathers did have direct contact with the young people's siblings. All of the young people had a good understanding of their fathers' patterns of communication and abuse. They knew when fathers were most likely to contact them, the methods fathers were most likely to use and the consequences they faced for engaging in, or avoiding, contact. For example, one young person described her father's pattern of abuse and how it is affected by his use of ice.

> Abby: Like because he's on ice … and he's been on it since some time last year, so that messes with his head a lot. So, he's not the best person to be around. He's got really bad anger and stuff. And he already had really bad anger before this, so this just contributes to it a lot more. And so yeah, he yells and screams and texts abusive stuff and all that ...
>
> Interviewer: And … does it happen more when he's using?
>
> Abby: Like when he's not using, when he's angry ... yeah, I just hang up on him. Or if I'm at home – because when he like used that, you like go through all those crazy stages. Like days and stuff – because he uses it consistently, he's never not on it. It's just like a cycle pretty much. So I always know how he is and I just know to avoid him and stuff.

This example highlights young people's awareness of their fathers' patterns of behaviour and the burden placed on them to monitor and manage fathers' abusive behaviour to ensure their safety.

The research team asked the group about the level of contact they wished to have with their fathers going forward. Three stated they did not wish to have contact with their fathers in the future. This example illustrates one young person's thought process about avoiding contact with his abusive father:

> 'Yeah, that was probably the best for me because I have very little respect for him and I thoroughly doubt he will do things that he needs to do to get the respect back.' *Paul*

The young people stated that it was rare for them to initiate contact with their fathers. It was usually their fathers who tried to contact them, either directly or through others. Abby gave an example of when she would initiate contact with her father:

> Interviewer: Are there any times when you feel you have to contact him?
>
> Abby: Just when I ask him for money. That sounds so bad.
>
> Interviewer: And how does that normally go?
>
> Abby: Because he knows if he gives me money that keeps me away longer, so he doesn't really give it to me. Sometimes, but not often.

These comments highlight Abby's dependency on her abusive father for income as the reason for her engagement with him. She risked contact when needing money. This shows how understanding the context in which technology-facilitated communication and abuse occurs is integral to understanding its dynamics and effects on young people.

3. Technology-facilitated abuse experiences

Young people reported most commonly experiencing abusive texts and harassing phone calls from their fathers. They indicated that their fathers also used fake accounts to harass them, destroyed their devices, controlled the family via technology, hacked into accounts and made threats via technology. All of the young people had also experienced unwanted contact from others on behalf of their fathers. Perpetrators used their friends and other family members to contact young people. For example:

> 'And he gets his friends to message me and stuff to get them to tell me things. Like from him, if he can't get a hold of me.' *Abby*

Abusive text messages contained threats to the young person and others, such as their mother or her family. They described the messages as abusive (containing name-calling), making orders and threats, and being emotionally manipulative. The quotes below illustrate the content of messages they have received:

> 'Like he'll call me the worst names you can think of … And he'd say not to come home and threatens me and all that. And threatens my mum's side of the family and all that, because I'm really close with my cousins.' *Abby*

> ‘Well to begin with it was like just asking how I was and telling me – ordering me – to contact him. And it steadily got more and more abusive toward me … Things like ‘don’t bother coming home. You’re not welcome,’ things like that.’ *Charlie*

Young people described harassing calls as disruptive, annoying and abusive. Perpetrators made repeated calls over periods of hours, resulting in young people having to turn their phones off or to aeroplane mode. One young person stated that if she picked up during one of these periods, her father would just scream down the phone line at her. The persistent, ongoing calls were disruptive to both the young people’s social lives and their education.

> ‘He’ll call consistently … he can still call me on no caller ID … like you see how he’ll just call consistently in a row … until I turn my phone off. And I’ll sit there and … hanging up, hanging up, hanging up. I’ve got to put my phone on aeroplane mode just so I don’t get calls and stuff … I can’t use my phone for hours at a time because he doesn’t stop calling … Like if I need to get somewhere, I can’t even message, I can’t read messages.’ *Abby*

Other young people reported that ongoing harassing calls occurred over hours while they were at school. In one case, detailed further below, the young person received detention for the disruption in the classroom. While young people could temporarily stop the calls by turning off their phones, they were fearful of the consequences of not picking up.

a. Consequences for avoiding contact with perpetrators

For young people, how effective they were at disengaging from perpetrators depended on behavioural patterns. Some fathers escalated abuse in response to their child’s attempts to cut off contact via technology – there were consequences for this disengagement.

> Interviewer: Yeah. And if – say you went home and you had not picked up for three hours, were you in trouble?
>
> Charlie: Yeah. There were times when we feared for our safety during times like that, because he’d be verbal, he’d have his arm raised and the rest of it, yeah.
>
> Interviewer: Okay. And so, when you don’t pick up his calls because you turn it off, are there any consequences of that?
>
> Abby: He used to call the police all the time to tell them to come get me from my boyfriend, and before I turned 16, [the police would] always would try to take me home. But I’d never go with them. And they eventually just gave up. They said ‘No, it’s fine. She can just stay here.’ ... They’d come all the time to try to take me home to him. Because they’d never listen to me when I said that he’s not right in the head. But after me just screaming saying I’m not coming, they just eventually thought like, clearly there’s something wrong, so we’re not going to bother anymore ... They just got sick of us and sick of my dad, because it was just like for stupid reasons.

Abby said that, at one point, the police were arriving three to four times a week.

Young people's attempts to avoid technology-facilitated contact with perpetrators worked in some instances, however, it was not always effective – even with the same perpetrator.

b. Impersonation

One young person reported that her father created fake accounts impersonating other people on social media services in order to contact her. At one point, he had created up to 50 fake accounts across social media services including Facebook.

> Interviewer: Okay. And when you block him, does he get angry in a different way?
>
> Abby: Yeah. He still does, but he makes fake accounts and all new accounts to message me [from]. And he's really – like he just finds any way to get in contact with me
>
> Interviewer: And how can you tell that it's him?
>
> Abby: Because I can just tell. And the way he talks, like sometimes he doesn't even try to hide that it's him. He'll just start screaming like from that account. So it gives it away.

Abby's father had also been able to access her accounts using her password, though she wasn't sure how he knew it. This was the only instance where a participant did not know how the perpetrator was using technology for the abuse.

c. Destroying and disabling devices

In the focus groups, young people reported that their fathers had physically destroyed or disabled their devices as one form of abuse. This was part of a broader pattern of control where perpetrators regularly intimidated their children by destroying household items.

> 'So my father, in high school when I had all … my tests and everything … anytime he found me on the Xbox or PC he believed I was playing a game – which nine times out of ten [it] was true, but he basically threatened to destroy the technology and he did that a couple of times to certain pieces of technology I used to have as a child.' *Charlie*

Technology-facilitated abuse continued as a part of fathers' patterns of control over their children and ex-partners. Young people were aware of the controlling actions of their fathers, especially in trying to obtain information about themselves, their siblings and mothers.

> Interviewer: And when your dad calls you, how do those conversations normally go?
>
> Charlie: Usually … with him almost interrogating me, so wanting to know what I'm doing, wanting to try and influence my life.

In some cases, the young people felt that their father was no longer interested in contacting or having any relationship with their mother. In these cases, the young person was then the primary target of abuse from their father. In other instances, both the young person and mother received abusive communications from the father.

> Interviewer: Do you see your mum getting upset when your dad texts or emails?
>
> Paul: Yes.
>
> Interviewer: And is that normally because he's asked something inappropriate or he's harassing?
>
> Paul: More that he won't agree with anything. Very combative and to me it feels like he's saying no just to disrupt.

Young people described the burden of the perpetrator abusing their mothers and siblings too, noting a need to monitor their communication with the perpetrator and the need to be vigilant for their own safety, and the safety of others.

Impact of technology-facilitated abuse on young people

Technology-facilitated abuse affected young people's relationships with both parents as well as their schooling.

In some cases, the young people saw perpetrators' actions as understandable, blaming themselves for contributing to negative relationship dynamics.

Schooling was affected by technology-facilitated abuse as perpetrators had destroyed devices, or removed them for a period of months, making it difficult for young people to study or complete homework. Abusive fathers' actions were also disruptive in the classroom.

> Charlie: Yeah. So, the first time it happened in that one particular class, the phone got taken and put up the front of the classroom. The teacher got sick of it because it wouldn't stop ringing.
>
> Interviewer: And they gave you detention?
>
> Charlie: Because of it, yeah.
>
> Interviewer: That's not fair. Could they see that it was your dad who was constantly calling?
>
> Charlie: Yeah, but the thing is they didn't care.

On this occasion, Charlie's father had called him constantly for hours while he was in class, hanging up and redialling every time he did not get a response. The vibrations disrupted class. This example points to a need to recognise the impact of technology-facilitated abuse on children's education. There is an opportunity for schools to develop strategies to recognise and mitigate the harm of this type of abuse.

Protective strategies

Young people described a range of strategies for dealing with the technology-facilitated abuse directed at themselves and their mothers. All of the young people felt their knowledge of technology was better than that of both parents. The young people interviewed rated their fathers' knowledge of technology as low.

> When it comes to technology, mum's not really good at it but my father's essentially illiterate. He can use a PC [computer] but he can't use Facebook, he can't use things like Twitter, Instagram, any of those ... He's managed to figure out how to use Skype though, which thankfully I don't have. *Charlie*

Despite their relatively low technological ability, perpetrators used text messaging, social media services and harassing phone calls to monitor, harass and abuse the young people. They also enlisted friends and family members in the abuse, for example by asking them to contact young people on their behalf. Technology-facilitated abuse does not require technological sophistication. It typically involves the misuse of common commercially available devices, applications and functions. Accordingly, young people's protective strategies were also primarily low tech. Young people changed account settings, block numbers and accounts, and collect evidence of technology-facilitated abuse.

1. Changing account settings

> 'I figured out which password he was using … to my account, yeah. I removed his account as an administrator … then changed the password so he wouldn't know what it was.' *Charlie*

Young people described a range of strategies for avoiding technology-facilitated abuse including turning off phones, changing accounts, changing service providers and removing their sim cards.

2. Hanging up and not answering

Young people reported not answering and hanging up as one way to manage technology-facilitated abuse.

> 'The good thing about technology, you can press the hang-up button whenever you want. You can put the phone down whenever you want. You can disconnect … I think a very common problem is that people don't know how to, they aren't really willing to. But that's something I try to exercise that I can just cut this off whenever I want.' *Paul*

3. Blocking accounts and numbers

Blocking was another tactic for young people to resist contact. It was effective in some instances.

> Interviewer: And if you had the choice, would you choose to communicate with your dad at the moment.

> Abby: No. Not at the moment. That's why he's blocked.

However, young people who relied on accounts owned by the perpetrator could not use this strategy.

> 'Because he owns the phone number, I'm not going to block him. So if I did block him, there's a good chance he would cut the number off, and it's the only phone number I do have currently and I don't have the money to afford another one, so it's a catch 22 for me.' *Charlie*

As the examples above show, avoiding contact and blocking were protective strategies available to young people. However, their effectiveness was shaped by the perpetrators' level of control in the relationship.

4. Collecting evidence

Collecting evidence of technology-facilitated abuse was another protective strategy for young people. Two young people were aware of the need to collect textual evidence to take to authorities, encouraging their fathers to text rather than call. One young person worked with his mother to document the technology-facilitated abuse she received.

> Charlie: She has some records but not very many. The main ones are text records, so photographed by my phone … as a screenshot.
>
> Interviewer: And was that your idea to take the screenshots?
>
> Charlie: Yes … So I'm one of these people who just looks up random information, and of course I've looked up legal issues and all sorts of stuff. So I understand that for information to be categorised and used in the court, it has to have timestamps, which is part of the phone thankfully with the screenshots. It also has to … be admitted proof as well [that] he has been continuously doing this sort of behaviour.

Charlie's mother had also documented the physical and verbal abuse committed against her for the length of the relationship. They had yet to take this evidence to the authorities. However, knowing Charlie's mother had evidence had deterred the perpetrator from making physical contact with the family.

5. Withholding information from perpetrators

Another approach to protect their mothers was for young people to withhold information from perpetrators.

> Interviewer: When you talk to your dad, does he ask you questions about your mum?
>
> Paul: Yes.
>
> Interviewer: How does that make you feel?

> Paul: Probed. But, generally, I just deflect. I can't see the outcome of these things. It's a question, it's shrouded in mystery. What is going to end up happening in the end? I just deflect usually and give a rudimentary answer.

Young people had also worked with their younger siblings to prevent them from revealing information about themselves or their mothers to perpetrators.

6. Help-seeking

The young people in our focus groups rarely sought support to deal with to technology-facilitated abuse. However, they did access support for domestic and family violence more generally.

One young person showed teachers at her school the abusive text messages she received from her father. The school referred the case to statutory child protection services.

> 'Oh, well the school has seen messages from him before. I showed them one of the messages … and then there was like a big thing … children's services got involved and all that.' *Abby*

Two of the young people had engaged in therapy. One was enthusiastic about his experience, the other felt it wasn't for her, instead preferring to speak to her friends. For the young person who was enthusiastic about his experiences in therapy, he noted that it provided him with an opportunity to engage with a service that was aiming to repair the relationship between himself and his mother following domestic and family violence. The service also assisted his mother in addressing abusive communication directed at her.

> 'Okay, initially, it was just email. What would happen is we'd go to either [therapist] here … or we've got my mother's brother … works as a social worker and then emails would go to him or [therapist] and they just screen them. If it's too distressing to my mother they wouldn't get passed on and there would be a receipt sent to my father saying, 'This is not being sent on, this is too -' I don't know, whatever's wrong. Email obviously isn't exactly the quickest form of communication, so eventually, it got down to text … but there's no filter. That goes on and off with my father using it properly and then getting angry at my mother for some reason my mother blocking him and month-on, month-off.' *Paul*

As well as having limited contact with formal support services, young people were also hesitant to seek informal support from family and friends, preferring to keep the abuse to themselves. The two female participants were more likely to have discussed the abuse with their friends, but still reported not fully disclosing the extent of the situation. In one case, the disclosure to friends only occurred after an account had been hacked by her father.

> Interviewer: And did your friends know it was him when he messaged them?
>
> Abby: Oh, well he stupidly messaged my boyfriend when I was with my boyfriend. We were just watching a movie … his phone went ding and

> it's all these abusive messages from me. And he's like. 'Oh, look at this.' I got onto it pretty quickly from there … he [had] messaged my friends too, and I … had to explain to them, but I didn't tell them the full story, but yeah, they understood.

The young people interviewed did not indicate that opening up about the abuse to friends or family was something that they wished to do. It was not a topic they routinely discussed with siblings, and they reported being isolated or feeling disconnected from extended family members – so not really seeing them as sources of support. However, two participants stated that they felt close to their grandparents and had discussed the abuse with them.

> 'So mainly she – my grandmother reacted with disgust at things like that, what my father had sent through. Mum, on the other hand, was more so distraught or alternatively very angry at … some of the stuff that he'd sent through ...' *Charlie*

The disclosure and help-seeking behaviours the young people described in this study can help inform the development of new approaches to support.

Summary

The stories young people shared in this research positions technology-facilitated abuse within the broader context of domestic and family violence against themselves and other family members. The most common forms of abuse were texts and harassing phone calls with the impact that it could disrupt education and affected their relationships with both parents. Most young people did not access formal support around the abuse, however they had been involved in support systems for domestic and family violence. Young people were sometimes the primary target of the abuse and sometimes affected by abuse aimed at their mothers.

Women who are domestic and family violence survivors

Participants

For this study, we interviewed 11 women who had children affected by technology-facilitated abuse in the context of domestic and family violence. The interviews focused on abuse involving or affecting their children. The women ranged from 32 to 47 years old, with an average age of 39. Ten women were currently residing in Queensland, one was in Victoria. All of the women were separated or divorced. All of the women's perpetrators were male. Five women had one child, two had two, two women had three children, and one woman had six. Nine of the women were born in Australia, one was born in Germany and one was born in Venezuela. None of the women identified as Aboriginal or Torres Strait Islander. The women's educations ranged from year 10 through master's degree. Two participants were stay at home mums, two were full-time students, one was between jobs, three were in casual employment, and three were employed full-time. The women's incomes ranged from $7,000 to $100,000 with an average of $44,100.

Technologies

The mothers reported using numerous devices and platforms for social and professional purposes. Similar to the survey results, smartphones were the most commonly used devices, followed by tablets and laptops. The women's technology use varied considerably, with some being active users of multiple technologies and others limiting their technology use as a result of perpetrators' actions.

Mothers reported using smartphones, tablets, laptops, fitness trackers, smart watches, smart home devices (Google Home) and wireless security systems (Arlo). They described their children using smartphones, tablets, gaming consoles (Nintendo Switch, and PlayStation), smart watches (Apple Watch, Spacetalk watch) and fitness trackers.

Mothers used a range of applications including texting/SMS/messaging, video calls, Facebook, WhatsApp, Instagram, Snapchat, Twitter, multiplayer online games, OurChildrenAustralia and MyMob.

Dynamics of technology-facilitated abuse involving children

Survivors' accounts show how technology-facilitated abuse is one part of a broader pattern of abusive and controlling behaviours that affect children.

1. Children are highly involved in technology-facilitated abuse in domestic and family violence

Findings in this report reinforce earlier research which showed that children and parenting are central to the dynamics of coercive control against mothers pre- and post-separation (Callaghan et al., 2018; Feresin et al., 2019; Katz, 2016). Similar to Feresin et al.'s research on coercive control in the context of post-separation parenting (2019), mothers in this study reported perpetrators using technology to make them feel guilty;

denigrate them and their parenting directly, via the children and through social media networks; threaten them, and interfere in the mother-child bond. Similar to Callaghan's earlier research (2018, p.198), participants in this study indicated that perpetrators 'use children as a vehicle through which to malevolently attack mothers for acts of autonomy and insubordination.'

The women in our study reported that children were involved in technology-facilitated abuse in two key ways:

1. *Perpetrators directly abusing children*

   Most commonly by monitoring or stalking, threats and intimidation, and blocking their communication.

2. *Perpetrators involving children in the technology-facilitated abuse directed at their mothers*

   Including mining children for information, encouraging them to participate in abuse, giving children devices that pose cyber security risks to them, sending abusive messages to the child's device, and calling their phones in order to verbally abuse their mothers.

One mother described how her perpetrator used Snapchat to abuse her children directly.

> 'Snapchats … abusing my son and saying, he's a pussy, and he's weak, and that he can't stand up for himself. And he's contacted my other children that he isn't the father of, via Facebook and all of a sudden he wants to be their friend on Facebook to monitor where we are … and saying, 'What are you doing there?' Abusive messages on Facebook … he'll comment abusive stuff to other people that have commented to my children, to me.' *Diana*

This father used technology to abuse children directly, to conduct networked stalking using the children and mother's friends on social media. He also used text messages to control the mother by refusing to return the children and blocking her communication with the children when they are at his house.

> Diana: I received many messages from him saying he's not bringing them home until they're finished doing their work at his work and blocking me to not answering messages when he's got the children. So, I've actually had him go and get separate sim cards with a different number and ring me up and abuse me and call me all sorts of names, pretending to be someone else, and the fake Facebook accounts, to all sorts of little things like that. …Threatening to not bring them back until I've done this or until he's done to this to them.
>
> Interviewer: What sort of things would he be expecting you to do?
>
> Diana: Either for me to run over and grab them and put myself at risk. That's generally what he's always asking; 'Well if you want them, you come and pick them up, and then I'll be here when you come,' in front of the kids.

One mother described how her perpetrator used texts to the children to manipulate her and the children, pushing for reconciliation.

Another described how the perpetrator stopped contacting the children once he was unable to use them to get information about their mother.

> ‘So up until recently … he was contacting her on her phone. But since the court orders, he only speaks to them on my phone. And now that that order is in place, he never contacts them. They contact him. If he knows that it’s them, he won’t answer. Because he doesn’t have the privacy that he had before.’ *Mary*

Another incident illustrates the dynamics of technology-facilitated abuse in post-separation parenting.

> ‘I ended up getting … [my daughter] a little, cheap $20 phone and I activated her own little SIM card and I sent a text message to him saying, ‘This is [our daughter]’s phone,’ and whereby the relationship between them could be facilitated.
>
> For the first two days, he called her twice, two afternoons in a row … on the first call … she was somewhat hesitant to talk to him, he was trying to find out where we were while he was talking to her on the phone and she innocently said, ‘We’re at [name of town], we’re swimming,’ and he said, ‘Oh. Can you put your mum on?’ She put me on the phone and he went, ‘Hey, are you guys at [name of town]?’ and I said, ‘We’re going,’ and he said, ‘I’m just up the road. I’m in [street name] Road in [name of town]’ … and I really had to quickly then click my fingers to [my daughter] to indicate we have to go now and got in the car and I said, ‘We’re leaving now,’ and he then tried to call the phone three other times after that.
>
> I answered the fourth time and he was going, ‘Who are you in the car with? Who are you in the car with?’ and I said, ‘Hello, [our daughter] can talk to you later, okay?’ because [our daughter] was listening to every word and then I just ended up hanging up. The second afternoon, he called again at night and I didn’t talk to him that time. The third day of the phone being in operation, when she was at school, he tried to ring the phone numerous times.
>
> I ended up answering it and was trying to engage in some kind of amicable conversation but he was under the influence of ice and as I was talking to him – we’d been on the phone for about half an hour and as I was talking on the phone to him, I walked up the hallway facing my lounge room and looked and he was peering in my lounge room window. I felt sick.’ *Donna*

This quote shows how perpetrators can use technology-facilitated communication with their children to gather information about their location and their mothers’ activities, putting the mother and children at risk of physical harm. It also reveals the stress put on mothers as they attempt to shield children from the abuse primarily directed at them, and the indirect impacts on children who both have their activities interrupted to flee to safety and can perceive their mothers’ fear.

Mothers whose perpetrators enlisted their children to participate in technology-facilitated abuse indicated that it strained relationships with their children.

> ‘He’s asked them to make recordings of me in my private home and conversations between myself and my current partner. So, two of the children have been asked to do that, and have, actually, made recordings; they’ll stick the phone underneath a pillow. My children aren’t overly keen about having a stepdad, and so he’s seeking, I guess, to capitalise on that, and he’s saying, ‘Well, if we can catch him out we can get him put in jail or get rid of him.’ So, the kids were, for a time, in July/August this year, putting their phones under pillows and hitting record on the Voice Memo app. Then he would, during his time with them, encourage them to AirDrop the communications and conversations that were privately recorded to him.’ *Bianca*

2. Technology-facilitated abuse continues at separation

Mothers reported that when other avenues of control and opportunities for physical violence changed at separation, technology-facilitated abuse took its place. Technology-facilitated communication took on an obsessive quality, with persistent, repetitive communication directed at survivors and their social networks.

> ‘On one occasion when [our daughter] was three weeks old and we were in a refuge, he would harass my family on the phone because he’d got – because when I’d had to flee, I left my phone there, he went right through it, got all my numbers out, got some guy who he reckoned was an expert at computers to have a look at all my coding on what I’d been looking at on the internet which was nothing … and going, ‘Oh my gosh, you’ve been doing so much shit,’ ringing my sister a million times saying horrible things, ringing my mother, frightening her. He would just ring and ring and ring. He rang me once so many times that I put my phone at the door of the bedroom … he rang so many times the phone vibrated right across the room. I think I had 57 missed calls once.’ *Donna*

This example shows how perpetrators can use unauthorised access to mobile devices to monitor women’s activities and contact their networks to extend the impact of their abuse when not in physical proximity.

3. Post-separation co-parenting is a key context for abuse

Post-separation parenting arrangements provided ample opportunities for technology-facilitated abuse. Even when domestic violence orders were in place, and helpful in managing some forms of abuse, family law orders were frequently used as an opportunity to continue abusive communication using the children and their devices. Perpetrators used children and their devices as a means to gather information about their estranged partners’ location and activities, and to engage in coercive, controlling, and abusive behaviours post-separation.

Some perpetrators gave children gifts with GPS tracking capacities. Sometimes they were ordinary toys adulterated to contain a tracking device.

> ‘When she was two at a changeover, he gave me a doll that [my daughter] supposedly wanted really bad and it's a doll that could move its facial muscles so it had a motor inside, which made it much harder

> to feel that there was something underneath the motor. It was a bit off because she just didn't … give a shit about the doll. She never looked at it. It was creepy as hell. It was just with us, but during that time when it happened, we lived in a refuge, so I wasn't supposed to give any area information, nothing about it, right? … I didn't know there was [a GPS device] inside, obviously, so for a while, I think about two months that doll came with every changeover … And that went on for weeks until [my daughter] had an appointment … and he said to me should I give you a lift home? … So, he said, 'you live at this and this address' and he told me the address where I live. And I was like, what the hell? You shouldn't know where I live. At that stage I didn't know if he followed me.' *Gabrielle*

Other perpetrators gave devices with built-in GPS functions as gifts. Two mothers reported that their perpetrators bought very young children (aged 3 and 6) Apple Watches. Another mother reported that her child came home wearing a GPS-enabled watch.

> 'So … he just returned my son to school and we got home and we're just doing our thing and all of a sudden my little boy goes, 'Mum, do you like my new watch?' And my heart just dropped straight away and I thought oh, okay. Then he showed me it and I thought oh my God. Now, this watch had no branding on it, so I'm like straight away I'm looking at it going this is not just a watch, this is something and then I actually posted a picture of it on Facebook, just the front and back of it. I flicked it over and then some wonderful person on one of the family violence pages I'm on did some quick searches and she found it and sure enough, it had a GPS tracker. Oh my God. I didn't know what to do … I have parenting orders that prevent my ex from knowing exactly where I live. He's only allowed to know the suburb and I have an intervention order at the same time.' *Grace*

4. Most abuse involves common technologies

Most of the abuse reported in this study involved the misuse of commonly use devices and applications. This means that perpetrators most frequently misused common, commercially available devices like mobile phones and other GPS-enabled devices such as smart watches which have legitimate dual uses and don't require special technical skills or knowledge to use.

Perpetrators misused applications like texting/messaging, email, and social media services like Facebook and Instagram. Only one survivor discussed a perpetrator giving a toy that had been tampered with in order to conceal a specialised GPS-tracking device. Nonetheless, survivors often felt their knowledge of technology lagged behind their perpetrators. For example:

> 'I thought when you deleted a photo off your phone – I knew it was all connected to the iCloud, but I'll never forget some deleted photos, and they were just of me. So it was like it was one of these selfie things and you take a few and delete, and it's already embarrassing enough and that's why I felt so self-conscious about it. And I walked past our office and sure enough, there were all those – my face was covering – and he had the massive Apple screen – my face, of all the deleted photos,

> because I had one left on my phone, and they were all up on the screen. And … he didn't need to tell me that he knew everything, it was so subtle, and there were all my faces up on this screen. … I couldn't believe it. It's all there, the footprint is there, and if they want to find it, it doesn't matter what you do. I'm a layman with technology, so we have no chance against someone who wants to use technology.' *Emma*

This example illustrates how ubiquitous, yet poorly understood, commercially available convenience functions such as cloud-based storage (which can link content across devices) can be used by perpetrators to monitor targets' activities and mine their devices for information that can be used as part of the abuse. Accessing cloud-based data does not require a high level of technical skill, but perpetrators may exaggerate their knowledge. As another survivor whose perpetrator was a police officer said,

> 'He used to tell me how easy it was to get equipment to stalk and monitor people. So, I had no doubt that this was deliberate and intentional. He does things like this to keep me living in fear.' *Grace*

The impact of women's feeling that they are ill-equipped to understand technology may be heightened in the context of coercive and controlling relationships, where women often experience an increased sense of perpetrators' omnipotence.

Several mothers noted the challenges involved in managing children's video-chats with perpetrators.

> 'So, initially, our court orders allowed him and gave preference to him having FaceTime with the children. So that was something that was taken out of my hands which was a complete invasion of my privacy. It put me in a situation where I had to – because the kids were young. Initially, when I left they were two and four and what I had to do was eventually get to a point where when I knew he was going to call, I had to position them in a corner of the house where there was just a blank wall behind them and try to tell them to sit there to have their call, so that he couldn't use it to access my house and see inside my house and that sort of thing.' *Grace*

5. Systems fail to recognise technology-facilitated abuse as part of coercive control

Survivors indicated that professionals' not being able to recognise the dynamics of coercive control and the significance of technology-facilitated abuse limited the effectiveness of their responses. Two areas of concern were policing and family law.

> 'The police and the authorities [need to] actually recognise that it's not just a squabble between two ... not dismissing someone calling you a name or threatening you just because it's over technology.' *Diana*

> 'So the law needs to change. There needs to be some recognition of technology-facilitated abuse in co-parenting because there is none. Whether you start at the ground with the police, they might acknowledge it but they're certainly not going to do anything if the child is mentioned, which he always does. Then a lawyer's going to look at it and they're not interested. So that's a massive problem, that there's no recognition … it doesn't make any sense that if … drugs or alcohol are

> a concern with a parent then there are tests that are required for the court to see did that person do it? But there's nothing for technology. It's just this open vast land … his IP is never checked, there's no accountability or consequences at all, none, for tech-facilitated abuse at all. And they know it.' *Emma*

Impact of technology-facilitated abuse

Women in this study described the harmful effects of technology-facilitated abuse on their children and themselves. Children were reported to experience anxiety, fear and guilt.

> 'It mentally destroys them inside. And then they worry to go on there and every time they get a message, they're not sure if they should accept it. Or a friend request, they don't know – it's like me, you don't know if it's really the person or not? You get a phone call and you'd look at it and you go, 'Well I'm not going to answer that.' It's pretty much living in fear.' *Diana*

Mothers experienced similar effects as well as damage to their relationships with their children. Some of the women in our study experienced technology-facilitated abuse as being worse than physical violence. It was confusing for survivors because they, like many others, found non-physical abuse and manipulation more difficult to identify as domestic violence than physical assaults.

> 'Yeah, it's actually … worse than getting punched in the head. It's actually worse because if someone just punched you in the head all the time, you'd still have some cognitive dissonance but you'd pretty much go, 'You're a piece of shit because you've physically assaulted me.' This stuff is far more sinister.' *Donna*

Mothers with young children worried about how they would be able to protect them when they got older.

> 'I don't know how it's going to go when she's a teenager, I think it's just going to be an absolute nightmare with the social media. … I'm just preparing for it to be bad and dangerous.' *Emma*

Taking technology away from children in an effort to protect themselves could strain relationships, especially with older children.

> 'As soon as I took [her phone], I was the worst person in the world. I was a slut, a C U N T, you know, like all these things that her father has been driving into her head. That's what I was, all of a sudden once it was taken away from her.' *Mary*

Identical devices, applications and behaviours are used to abuse and protect

The women in this study understood that the same technologies and behaviours can be used to both abuse or protect. They stressed the importance of understanding the context of technology use and noted their fears about systems (e.g. legal) getting it wrong, based on experience.

> ‘I think, especially, when a person is a perpetrator, and they’re convinced of their own victimhood or at least they’re feigning injury; that can confuse issues. … also victims who have been deeply impacted by trauma … they act in inexplicable ways in their desperation to feel and be safe, they can look, for all intents and purposes, as a perpetrator … it’s so hard, and I don’t know that any system has the sophistication to do that.’ *Bianca*

Protective strategies

Mothers in this study described using a number of protective strategies to deal with technology-facilitated abuse. Strategies include resisting perpetrators’ negative use of technology.

1. Acknowledging the abuse

Some of the mothers in this study indicated that counselling to talk about the abuse, and communication about abusive messages and phone calls, was helpful to children.

> ‘At first, it used to impact them a hell of a lot, really bad. But since we’re doing the counselling now, they come straight to me and they’re not as – they’re still a bit nervous but they come to me and they open up, saying, ‘Mum, dad just sent this. I didn’t bother answering, but why did he say that for?’ And I’ll say, ‘Mate, you know what your dad’s like, he’s not – just ignore that and you’re a great kid mate, I love you lots.’ Just to reassure them that they’re okay, no matter what he says, they’re a good kid and I love them and I’m always here.’ *Diana*

This example shows how children can benefit from acknowledging and talking about the abuse.

2. Monitoring children’s communication

Survivors tried to monitor children’s communication with perpetrators in order to protect them. For example:

- ‘I have all of the children’s passwords to their phones and social media accounts, and, I guess, I try and monitor them closely.’ Bianca
- ‘I think that with parents, you just have to be not complacent, and you actually have to physically monitor what your children are doing. Even if it’s like checking their histories or having them sit on the kitchen table where you can see what they’re doing. And obviously put an age limit. I think that a lot of it does come down to the responsibility of the parents at the end of the day as well. Because children are young, and they don’t know any different. Their brains aren’t mature enough to know how to handle or to know if they’re being abused or not, or mistreated.’ Kelly

However, this was difficult in real-time even with young children and especially with older children who often had numerous accounts to get around parental supervision.

3. Changing passwords and settings

Changing passwords and settings was another protective strategy mothers tried:

> ‘I delete that Google account from my devices and I also change all my passwords from my other accounts.’ *Alejandra*

4. Blocking accounts and numbers

Blocking accounts and numbers was also seen as a protective option.

> ‘I only just finished having a chat to my son about this that he needs to make sure that he has him blocked on every single thing. If he wants to have the internet and have Facebook, he needs to make sure that he is blocked. But then he said he got a phone call from another random number, and that was his dad. And he only said that to me before and so I said, ‘Well [son], you didn’t tell me.’ And he goes, ‘It only happened yesterday.’ And he said, ‘I love you son. I’m sorry about what happened.’ And I said to my son, ‘Just block that number too.’ So, he’s blocked that number too now.’ *Diana*

5. Physical measures

Physical measures were also a protective strategy used by mothers experiencing technology-facilitated abuse, as the following quotes show:

- ‘So anyway, someone on Facebook, and I don’t know if this is true … They said if you wrap it up in silver foil it can interrupt signals to and from it. I don’t know if that's true, but I did it, didn’t care. And then I thought, I didn’t want my son to have it obviously because I wanted to wrap it up in silver foil. So, I hid it and I just pretended I didn’t know where it was.’ *Grace*

- ‘I unplug it and cover it just in case, and I say I'm going to leave the camera where you left it but it's not going to be doing a whole lot unplugged and covered up.’ *Alejandra*

- ‘[My new partner] and I discussed rules … so, we now have a charging station for our electronic devices, so the children are required to put their electronic devices up on the charging station at bedtime, or 9 pm, or whatever is latest. So, that we can, physically, see that they’re attached to the charger and sitting in a location that we can see, so we know they’re not under a pillow recording us somewhere. So, we do that, we just put some rules in place around that. I’ve had conversations with the children about privacy and respecting both parent’s right to privacy, and that they do have a role to play. Even though they’re not to blame for the situation, they can take action to be respectful of both of their parents, him and me included. So, just other than education and that limitation on having their devices all the time, and then that also gives me the opportunity, once they’re asleep, to go through their devices and look at what they’ve been doing. But they’re getting smart, they’re getting older, they know how to delete shit, they delete history all the time, I can tell.

> Like, ‘Oh my God, I have no idea what you guys are doing online,’ I just want to smash the phones, but at the same time, it’s good to have them because then I can keep them safe, myself.’ *Bianca*

6. Legal measures

Women in this study reported that domestic violence orders could be a valuable source of protection from technology-facilitated abuse involving children. Seven of the women in our sample had current domestic violence orders. One was in the process of trying to get an order. Two had had domestic violence orders in the past but they had lapsed. Only one had never had a domestic violence order. Although it is often claimed that court orders are ‘just a piece of paper,’ several women in the study reported that well-written orders contributed to a significant reduction in technology-facilitated abuse.

> ‘Yeah, well now he doesn’t have private access to my kids to be able to, I guess, find out what I’m doing. And talk about silly things. Like they never just have a normal conversation. You know, how was your day? What have you been up to? All that kind of stuff. It has to be a normal conversation and that’s not good enough for him. So now he doesn’t speak to them at all … Oh, it’s made a huge difference. I actually have control now. I can actually monitor what my kids are being exposed to.’ *Mary*

Police and court responsiveness to technology-facilitated abuse and breaches of orders was extremely helpful to the women. Some successfully used electronic evidence of communication that was in breach of orders to report breaches to police. For example:

> Helen: I went to the police station, they handled it all and then they took him in and took him to court and everything.
>
> Interviewer: And this was all just – sorry – but just to be specific, that – the breaches – so you went into the police, you showed them your phone, the text messages – and the police took it seriously …
>
> Helen: Yes.
>
> Interviewer: … and picked him up, took him and put the application into court and the magistrate took it seriously?
>
> Helen: Yes.

Some perpetrators tried to work around the order, continuing abuse without violating their interpretation of restrictions in the order.

- ‘Well originally it was iMessage. It was texts. That was the initial. And leaving messages or doing voice recordings and sending them via texts or sending them via … so especially in the first protection order when it was first made, ‘You’re not allowed to email her’ so that what he would do is he would voice record and then attach it to an email thinking that’s him getting around [the order].’ *Kristin*

- ‘Well, he does it to my eldest daughter. Currently, he’s not allowed to contact me because he’s on bail at the moment as well, for domestic violence with myself. And he’s not allowed to contact me, his bail

> conditions [are] not to contact me. He has blocked me at the moment on Facebook and blocked my daughter on Facebook. He's blocked my daughter – he unfriended the oldest one, my daughter, on Facebook but kept my daughter's boyfriend. And has been messaging him about things instead of myself and my daughter. He's kept him on there as a means of keeping open communication, or maybe seeing what's going on. I think he'll get in trouble with my daughter's boyfriend. But obviously, with me and my daughter, we're on the DVO, so he doesn't want to maybe breach his domestic violence order.' *Kelly*

Police responses were inconsistent, however, with some police failing to support applications for domestic violence orders or act on breaches of existing orders based on technology-facilitated abuse.

- 'It wasn't that helpful anymore when we tried to ask the police to see if they can make a DVO out of this, and they were like, no, we can't because it wasn't physical violence.' *Gabrielle*

- 'Yeah, a bit of both and because we've been separated for so long. Some police are like, 'Oh but you've been separated for nine years, so what's happened? And when I say it kind of never stopped. It just goes quiet for a little bit and then it's back again. … I feel like they don't really believe me. 'But if it was going on for that long and it was that bad, why didn't you say something earlier.' *Diana*

Unfortunately, the effectiveness of domestic violence orders was frequently undercut by family law orders making exceptions to contact and communication restrictions around parenting.

Positive uses of technology in the context of domestic and family violence

While some perpetrators use technology as part of their overall pattern of coercive control, survivors also deployed technology for positive, protective uses. Parenting communication platforms and evidence collection are two examples.

Participant, Bianca, noted the use of technology for protection or at least evidence, while explaining her anxiety about how it will be used:

> 'I think that technology, in the lives of women who've left an abusive partner, is definitely a double-edged sword, especially when they have children and have to co-parent with that abuser. I think it can be both problematic and beneficial for us. I use a dashcam to supervise changeovers because we have to meet in the middle of nowhere and I need a modicum of safety, so I use technology myself. And, I guess, the key to unravelling this particular issue is around the motives of the person using the technology, and it's really, really difficult to address in any legal or policy setting, and I'm just really anxious about how that might be done. How to prove or satisfy yourself that someone's stated intentions were genuine in the absence of any kind of compelling proof because there never is compelling proof.' *Bianca*

Participant, Emma, used the online parenting communication platform Our Children Australia, which she fought to have included in her family law orders and planned to continue using even after the order expires.

> ‘After we finish using it with our court orders, Our Children Australia has a one-parent profile, so the email I’ll have is still Our Children Australia, we nominate which email. So that will give me that protection of he can’t send a virus, they’ll have their own firewall and everything,and he knows that I’ll put everything on Our Children. At the moment when I take a photo of the text messages, I don’t upload that into the information file, but I will do that when it’s just me so it’s all collated in the one spot. So I will certainly use it [on an ongoing basis] because I just think it just saves so much of the abuse and evidence.’ *Emma*

A different parenting communication platform, MyMob, was also used by mothers, which reduced but did not eliminate the technology-facilitated abuse.

> ‘We’ve been court ordered to use what we call MyMob which is made by Berry Street I believe ... It’s very limited, it’s very glitchy. The good thing was prior to that we used to have a communications book, which means I had to sometimes when the kids were younger, physically go to change over just so that he had the communication book passed to him. And then he also would write, four full pages of abuse and accusations, trying to force me to engage with him. MyMob has helped a little bit to cut that back. But it’s still awful, like I just find I get anxious just dealing with him in general. So, the minute I see his name on my phone, it’ll trigger anxiety, just instantly, just because you go, ‘Oh God, what now? What does he want now?’’ *Grace*

Bianca used the eSafety website to explain behaviour that may be ambiguous out of context to magistrates who might not understand coercive control.

> ‘I’m using the eCommissioner’s website to present information around how I came up with my particular strategies for protecting my children online from strangers. So, I can say to the magistrate, ‘Here, these are legitimate things, I’m being guided by someone who knows what they’re talking about, and I’m not doing it to abuse [the perpetrator], I’m doing it because the eSafety Commissioner said so.’’ *Bianca*

These examples highlight the importance of preserving and protecting adult and child survivors’ safe access to technology as well as emerging technology best practices.

Summary

Mothers in this study provided rich data about the dynamics of technology-facilitated abuse involving children. The mothers' accounts situate the technology-facilitated abuse affecting children as central rather than peripheral to coercive control. Survivors described the serious impact of the abuse on children and multifaceted efforts to mitigate it. The mothers also provided a number of recommendations for current and future practice to limit the harms of technology-facilitated abuse on children.

Men in perpetrator programs

Participants

Eleven men identified as perpetrators of domestic violence participated in interviews for this research. All of the men were attending a Men's Behaviour Change Program (MBCP) at the time of the interview. They ranged in age from 25 to 52 years with an average age of 40. The men were either the biological father or stepfather to 37 children and were parents to an average of 3.36 children (ranging from 2 to 6 years). Five of the 37 children were adults, ranging from 18 to 26 years. The 32 remaining children ranged in age from recently born to 17 years, with an average age of 9.59 years.

At the time of interview, all of the men participating were subject to a legal order related to domestic and family violence. Nine had current Domestic Violence Orders (DVOs). The other two had child safety orders (CSO) restricting contact with their children. Eight of the men were separated from their partner and one of the separated men had started a new relationship. Two were currently living in the same household as their partner after a period of separation or having the DVO varied.

The men in this research had all been referred to the MBCP because of a DVO or a pending court appearance.

Dynamics of technology use and abuse

This section presents an overview of the main themes that emerged from interviews with the men. All reported perpetrating physical violence and verbal abuse. They described using technology as a method for perpetrating abuse and, in some cases, it was a precursor or trigger for acts of abuse and violence. Men often were not forthcoming in discussion of their technology use in their relationship with their children and partner (or ex-partner), preferring to talk generally about their situation instead. This required interviewers to repeatedly bring the participants back to the influence of technology in their lives. During the course of the interviews, each did disclose technology-facilitated abuse.

The men participating in this research were generally willing to discuss their current situation and the circumstances that led to them attending the MBCP. However, most showed low levels of responsibility for their violence, often blaming or implicating their partner or other circumstances such as excessive alcohol use. In a number of cases, the man described using technology in ways that could be defined as domestic violence with their families. This does not mean they recognised their use of technology as abusive behaviour. Technology often featured in men's contact with partners and children following separation or legal intervention, especially after a DVO being issued or following a violent incident.

Most men used mobile phones as their primary means of communication with children and partners. Perpetrators described a continuum of behaviours, from appropriate use of technology through to technology-facilitated abuse. There was little evidence of sophisticated uses of technology to track or spy on partners or children. Rather, they tended to use low tech forms of abuse. Most men used a mix of texting, messaging (via platforms such as Facebook and Snapchat) and calling via phone or FaceTime. They reported limited use of social media posts rather than systematic use of social media. Some men used gaming to communicate with their children, for example via PlayStation or Xbox.

Six broad themes emerged from the interviews. These provide insight into the participants' understanding of their relationships. They talked about multiple family relationships, such as contact with children from previous relationships, domestic violence in current relationships, and communication with their families of origin and in-laws as part of the interviews.

1. Prerogative to control the family's technology use

A strong theme across the interviews was the men's assertion that they had a right and moral responsibility to restrict the use of technology in their household. They often expressed concern that their children and partners were consumed by the use of technology. They expressed frustration that family members did not adequately communicate, interact or respond to their requests to do homework or household tasks due to engagement with technology. They described their partners and ex-partners as using social media more frequently than the men did themselves. Men were often critical of their partners for not controlling the children's use of technology and not modelling good use of technology. This was sometimes the basis for violent outbursts such as pulling modems out of the wall, destroying devices, disconnecting the internet, or locking central components such as wires or devices in a vehicle or taking them away from the family home. For example:

> 'I disconnected the Wi-Fi completely, the NBN. Pulled all the plugs out, that was it. None the wiser on really how to put it all back together kind of thing, plus you take the lead with you, so they can't actually hardwire or plug it back into the wall – and hide it. I used to hide it, lock it in my car. That's what I used to have to resort to. Just to get a conversation out of them.' *Sam*

This example shows how physical control over internet access or devices can be used to prevent family members' technology use and communication with others.

Some perpetrators used their partner's technology use as a basis for disparaging their parenting.

> 'With the technology thing, I would like to put guidelines down for them [the children], but I can't do that if my wife is not going to follow it, you know what I mean? So it's kind of like a double standard for them. I'm not blaming her or anything, but I can see when she's on [her phone] – the little boy's always running around her trying to get her attention, but she's kind of there but not there kind of thing.' *Sam*

This led the men to talk about limiting and controlling the use of technology by children. The men often reported that the phone and internet accounts were in their name. Account ownership allowed perpetrators to control the type of plan and payments.

As highlighted above, men often justified control over technology as out of concern for their children. For example, one man forbade the use of YouTube because he thought it was influencing his children:

> Interviewer: And are the kids into YouTube as well?
>
> Colin: Banned in my house for them.
>
> Interviewer: Is that because you're worried about what they'll see?

> Colin: They used to be able to be on it, but some of the things that were coming up and that they were watching I did not agree with, and some of the way some of the people were speaking, was apparent that my kids were picking it up and they were speaking like that as well. And, no, that's not acceptable. Cut, finished.

This example demonstrates how important the overall relationship context is for understanding technology-facilitated abuse. Perpetrators' control of the family's technology use cannot be understood by looking at a single act. The overall pattern of isolating and controlling family members is what gives individual incidents their meaning. In this case, prohibiting YouTube use may not be easily recognised as abuse when taken out of context. However, abusers tend to use authoritarian parenting styles. This example also shows how the same behaviour (limiting children's access to specific media) can be abusive or healthy depending on the overall context.

Men expressed concern about the pace of change in technology as well as the increased intrusion of online activities in their children's lives. This included voicing concerns about the impact of technology on children's social development and communication skills. Men used a moralistic tone when discussing their concerns about technology, presenting their relatively low use of social media services as a purer way of communicating.

Despite their concerns about family members' technology use, perpetrators reported purchasing technological devices for their children. Often, they characterised this as part of their role as provider for the children. In a few instances, men purchased devices for their children during separation as a means to maintain contact with them.

2. Men used basic technology

In most cases, the research participants did not report high-level technical knowledge or sophisticated technology use. Most instances of technology-facilitated abuse involved texting, messaging or phone calls. This is consistent with findings from the survey and interviews with young people. In a few instances, the men reported that they had monitored their partner or ex-partner via social media (mostly Facebook) to find out about their movement or activities. In one instance, the man described stalking his ex-partner when she was out with friends socialising. There were some instances where men described using GPS-enabled location services on their own phones as well as their partners' and children's phones. In a few instances, the men described monitoring location via GPS data as a method for 're-establishing trust' when they were jealous or suspected a partner was using drugs. One man reported using GPS data to monitor a teenage child who was out with friends.

In line with men's relatively basic use of technology, some fathers expressed concern that their children had more technical skills and knowledge than they did. Some relied on their partners or other family members to help them use technology. Sometimes this was related to poor literacy skills. A few men relied on partners to respond to emails and complete online payments and registrations. It is worth noting that the majority of the men in this study were from low socio-economic backgrounds. Their technology skills and literacy were likely influenced by this context. This finding highlights the vulnerability of women to being coerced into helping men use technology even as they are subject to technology-facilitated abuse. It also indicates that relatively simple solutions may be useful for addressing technology-facilitated abuse in some families.

3. Reliance on smartphones to communicate

While men engaged with technology at relatively basic levels, they relied heavily on smartphones for personal, family and professional communication. Men had limited engagement with other technological devices such as computers (including laptops), tablets (e.g. iPads), and gaming devices such as Xbox and PlayStation. Often, these other devices involved their children because they were purchased for the child. Employment in trades and subcontracting often necessitated men to be on call via smartphone. Some men reported that, due to separation, they had left other devices in the family home and could no longer access them. In a few cases, this provided a justification for men to return to the family home and take devices.

4. Use of technology at separation and following police intervention

A recurring feature in the men's interviews was the use of text (SMS) or messaging after separation and police intervention following domestic violence. Smartphones were the group's preferred device.

> 'Like, the TPO (Temporary Protection Order) says no contact period, but [I can still contact her] because we have like a signed piece of paper saying you can contact her through email or text only in regard to supervised visits or phone calls with the children.' Cliff

As physical contact could no longer be made, technology-facilitated contact increased following police intervention. The men and their partners commonly communicated via text or email when orders prohibited direct contact. In a number of cases, men asked their partners to have the DVO varied to allow contact via technology or access to children. Two men used technology to get partners to return to sharing a house. This use of technology is important to consider in safety planning, as women are potentially vulnerable and can be coerced to allow contact.

5. Impact of technology-facilitated abuse on children and women

The men did not openly discuss the impact of technology-facilitated abuse on children or their partners. However, the interviews pointed to significant impacts on their children and partners. For example, men reported texting children or partners repeatedly in a short space of time. They described demanding responses to their texts or calls immediately and punishing non-compliance by sending numerous texts or social media messages. Sometimes, this resulted in women complying with the request for contact or changing their police statements. In other cases, children and women ignored or blocked the man from contacting them. Blocking had mixed results, with some stopping the behaviour while others increased attempts to get a response, with messages, using multiple technology platforms and making phone calls to or attending the family home. This is consistent with the reports from young people, mothers and professionals.

6. Technology in men's daily lives

The men's interviews highlighted the different, subtle and overt ways that technology is used in their own lives and their interactions with their children and (ex)partners. With technology embedded in everyday life, it is important to look at men's use of technology

and their understanding of what is acceptable or abusive communication. The use of technology-facilitated communication in post-separation parenting arrangements was key in all the men's interviews. There was little evidence that men considered coercive, controlling, harassing and threatening use of technology to be abusive. Because of this the men were forthcoming in describing legitimate and abusive uses of technology. Despite abusive communication being a component of the men's behaviour change program that they were attending, the men expressed little understanding of technology-facilitated abuse as a component of domestic and family violence.

An important aspect of our findings is the pervasive way technology use continued post-separation. This is not due to high levels of technology skills. Perpetrators relied on technology to negotiate financial and family contact issues, as well as using it as a method to maintain coercive control and seek reconciliation.

Summary

The men's comments provide important background for understanding technology-facilitated coercive control. Although the men interviewed in this study were already engaged in a MBCP, they did not understand that technology-related behaviours were problematic or part of domestic and family violence. All of the men described behaviours that could be considered technology-facilitated abuse, especially controlling their children's and partners' use of technology and access to the internet. The men expressed feelings that they had the prerogative to control their family members' use of technology. The feeling of entitlement and moral obligation to control family members' behaviour can be linked to coercive control and also the men's justification of physical, verbal and psychological abuse. The men in our sample reported low technology skills, with most relying on mobile phones. Significantly, the men described continued use of SMS and other forms of electronic messaging to communicate with their children and (ex) partners despite DVOs and child safety orders restricting contact with their children. This was a common strategy to initiate contact and have their partner vary orders so that contact could be resumed and, in some cases, allowing the man to move back to the family home.

Technology security threat analysis

Technology is pervasive in modern life. The use of mobile devices has increased so that over 85% of the Australian population own or use a mobile phone regularly (Statista, 2019). It is therefore not surprising that technology is commonly used in domestic and family violence. This study provided new information about the ways children are affected by technology-facilitated abuse in this context. This section discusses key cyber security aspects of technology-facilitated abuse affecting children.

Domestic and family violence involving children poses a unique set of cyber security threats. Children rely on their parents to provide the technology devices and accounts that they need. These are sometimes paid for and controlled by domestic and family violence perpetrators. Children may physically move back and forth between the homes of abusive and non-abusive parents, taking devices with them. This can pose a risk where GPS-enabled devices reveal location information to perpetrators. In addition, perpetrators often have physical access to survivors' homes and devices as well as intimate knowledge of personal details that can enable unauthorised account access. This specific set of cyber security risks has been referred to as the 'intimate threat model' (Dragiewicz et al., 2019).

The most commonly used devices mentioned in the survey and interviews were smartphones. In some cases, perpetrators provided devices to children and owned the accounts they used. Identical technologies could be used both for abuse and for protection. In healthy parent-child relationships, mobile phones or smart watches may be used for safety. GPS tracking mechanisms shared across devices are provided by manufacturers for loss prevention, such as Find My Phone. Likewise, smart watches and fitness trackers advertise GPS tracking capabilities as a selling point. Unfortunately, perpetrators can use commercially available devices to monitor targets without their permission (Chatterjee, et al., 2018; Dimond et al., 2011; Douglas et al., Freed et al., 2017). In this study, participants described perpetrators giving children phones, smart watches, fitness trackers and other devices. The cases show that perpetrators do not need special technical skills or standalone devices for stalking. The majority of location-tracking cases in this research involved the misuse of these devices and functions.

Mobile devices and fitness trackers are not the only devices that can be used for physical tracking. Standalone GPS trackers are readily available and small enough to easily conceal in motor vehicles or other commonly used objects like prams. Some professionals and mothers in this study reported incidents involving this type of location monitoring device. Wireless security cameras were also used to observe survivors' houses to see who comes and goes and note when they are alone. In one case, a perpetrator used a drone to monitor his children remotely. This was rare. Surveillance drones powerful enough to be useful are relatively expensive and require more advanced skills to use. However, as these devices become cheaper and more common, they may be used by perpetrators more frequently.

Spyware is designed to covertly monitor online communication, activities and location without permission and relay the information to a third party. It is a form of malicious software or 'malware' that can be used to provide close monitoring. However, spyware usually requires physical access to a device and may require a higher level of technical skill to use. While 21% of survey respondents indicated that perpetrators had installed spyware on a child's device, no young people, professionals, mothers or perpetrators identified specific spyware applications. This could be because professionals and survivors use the term 'spyware' to describe the misuse of devices and applications to stalk and monitor. The qualitative data from this study suggests that the misuse of

everyday applications and devices is far more common than the use of purpose-built spyware. This is consistent with previous research investigating the spyware used against intimate partners (Chatterjee et al., 2018).

The misuse of linked accounts by perpetrators poses another cyber security risk to children. Several participants in this study described how perpetrators (offending ex-partners) were able to access or create linked accounts (generally without their ex-partner's knowledge) because of their familial links with children. According to research participants, some of these accounts include Australian Government accounts such as My Health Record, cloud services such as iCloud and Google, and even e-commerce accounts such as an e-toll account. Children are also unlikely to be aware of these forms of unauthorised account access. However, unauthorised access to victims' accounts can have indirect implications for children's safety by revealing their location and activities. It is suggested that screening tools for professionals and legal measures may help to address this issue. See page 73 of this report for more details.

Areas for consideration

This section draws on suggestions from study participants and insights gathered from the data. It suggests future actions to address technology-facilitated abuse involving children in the context of domestic and family violence. While specific to this issue, some of the suggestions could benefit a broader population.

1. Education about technology-facilitated abuse in the context of domestic and family violence

A key finding of this study was that more education about this type of technology-facilitated abuse involving children is needed. The educational needs varied across participant groups.

2. For children

Children could benefit from education about healthy and abusive technology use that includes discussion of domestic and family violence. They could also benefit from age-appropriate, practical education about safe technology use. Older children could be educated about available resources if they need help dealing with technology-facilitated abuse in the context of domestic and family violence.

3. For non-abusive parents of children affected by technology-facilitated abuse

Non-abusive parents could benefit from information about existing technology safety programs and resources such as phone replacement programs, monitored and secure parenting communication platforms and where to get children's devices checked for cyber security. They could potentially use easy-to-understand information about technology safety, such as how to check privacy and location settings on children's devices. Education about the cyber security risks associated with devices children use regularly (such as games and smart watches) may also be beneficial.

4. For domestic and family violence perpetrators

In this research, perpetrators did not acknowledge that their control over family technology use was part of domestic and family violence, even when they destroyed devices and removed parts in order to prevent technology use. As such, perpetrators could benefit from education to clarify that controlling family communication and destroying devices is part of domestic and family violence. The study revealed that perpetrators often used technology-facilitated communication with children in violation of existing legal orders post-separation. To address this, it is important that explanations of domestic violence order conditions include clear information that any technology-facilitated abuse, including via children's devices or accounts, is prohibited. The explanation should also provide detail about what counts as technology-facilitated abuse. Examples of prohibited behaviour could be informed by victims' experiences with their perpetrators.

5. For professionals who work with domestic and family violence cases

A significant portion of professionals who come into contact with domestic and family violence cases reported not knowing about technology-facilitated abuse involving children. This group would benefit from education about the types of technology-facilitated abuse affecting children and its negative effects. Professionals would also benefit from knowing that most technology-facilitated abuse is conducted using common, dual use, devices and platforms rather than true spyware. And so they may need less technical expertise to investigate and respond to technology-facilitated than they would expect.

6. For legal professionals

Legal professionals could benefit from education about the dynamics and prevalence of technology-facilitated abuse and its effects on children. They should be informed about the benefits of comprehensive, well-written domestic violence and child protection orders that explicitly address technology-facilitated communication via children's devices and accounts. Legal professionals could also benefit from clear information about how they can effectively use evidence of technology-facilitated abuse to assist with securing legal orders and prosecuting breaches of existing orders.

7. For police officers

Police officers may benefit from education about the prevalence and harmful effects of technology-facilitated abuse involving children in domestic and family violence. This could help them recognise and investigate this type of abuse. Education about these issues could facilitate effective police responses to domestic and family violence cases. Police officers may benefit from cyber security training to help them advise crime victims about how to collect evidence to support applications for domestic violence orders and reporting breaches of existing orders. Police could also be informed about existing online safety resources so they can refer victims for support.

8. For schools

Schools provide a location to share information about technology-facilitated abuse with children. They can be educated about the role of technology-facilitated abuse involving children in domestic and family violence and its impacts. This could prepare schools to identify and respond to this type of abuse, which may otherwise be misinterpreted as a behaviour problem.

Other strategies

1. Providing hands-on technology security support

Many professionals and survivors said that they needed hands-on support with technology safety to better protect children. Survivors were often overwhelmed by the task of teaching themselves about cyber security during a traumatic time. Professionals frequently reported they lacked knowledge about cyber security and the few professionals and survivors who were able to access hands-on support appreciated it. Cyber security support could take place at a number of locations including computer stores for help with device settings, advocates to assist in identifying cyber security risks, home security services to check for surveillance devices, mechanics to scan cars

for tracking devices and skilled IT support to help detect and remove hidden spyware. Emerging ‘walk-in clinic tech’ support models could be trialled in Australia (for example Cornell Tech, 2019). This support should be informed by individualised safety-planning as domestic and family violence victims’ needs differ from case to case.

2. Empowering victims

Child and adult victims and professionals emphasised the need to take victims’ perspectives into account. One-size-fits-all interventions, such as cutting off all communication, may be impractical or unsafe in individual cases. Victims are often in the best position to make decisions about what type and amount of technology-facilitated communication with perpetrators are safe for them due to their knowledge about perpetrators’ behaviour patterns and the likelihood of escalation. Listening to victim input and providing victims with the resources they need to protect themselves could help to empower them.

3. Developing tools

The study data suggest that not all professionals are asking about technology-facilitated abuse in the context of domestic and family violence, so screening tools could be developed to help professionals gather information about technology-facilitated abuse. These tools may help professionals consider the range of technologies involved in abuse and how to best mitigate the risks. For example, technographs (see for example Cornell Tech, n.d.a) can be used to systematically identify technologies and accounts used by each person in the household. Technology assessment questionnaires (see for example Cornell Tech, n.d.b) can help professionals think through technology security risks and inform protective action.

4. Providing access to affordable tech

Some children rely on devices and accounts owned by perpetrators. This poses challenges when they try to protect themselves from abuse. Perhaps existing phone and credit programs like Safe Connections could be extended to include older children as well as adults.

5. Legal action

Study participants described the benefits of legal action for reducing technology-facilitated abuse. Some participants reported that domestic violence orders helped to reduce the abuse even when they did not explicitly mention technology. Others described how electronic evidence of abuse was helpful in prosecuting breaches of domestic and family violence orders. Some professionals suggested creating case review processes to ensure compliance with conditions in domestic violence and family court orders, including blocking children’s communication with the non-abusive parent, destroying devices, bypassing cybersecurity measures on children’s devices and accounts, and abusive communication using technology.

Future research

This study was designed to investigate technology-facilitated abuse involving children the context of adult domestic and family violence. More research would build our understanding of the variations in abuse across different domestic and family violence scenarios and life-stages.

This report suggests key areas for future research:

- Further research directly with children and young people who are affected by domestic and family violence. This would provide valuable knowledge to guide practice and policy to better support all young people. Collaboration with services specialising in children and domestic and family violence and a long timeline could support the recruitment of children and young people.
- Research with immigrant and refugee women to better understand opportunities for addressing the specific challenges in CALD communities. This research should be conducted in partnership with services supporting immigrant and refugee women.
- Co-designing research with survivors in Aboriginal and Torres Strait Islander communities to better understand the dynamics and structural contexts of technology-facilitated abuse. This should be led by Indigenous research partners and scheduled over a generous timeline to permit meaningful consultation and collaboration. Specific studies are needed to study technology-facilitated abuse in Aboriginal adn Torres Strait Islander communities in recognition of the great diversity in culture and community contexts.
- Evaluating existing technologies, resources and programs for use in domestic and family violence cases affecting children. This could include evaluation of existing monitored parenting communication platforms, devices, online resources, training programs and replacement device programs.

This study brought together multiple perspectives to help build an understanding of technology facilitated abuse involving children in the context of domestic and family violence. As the first study designed to look at this issue, it provides a broad overview of the issue that can be refined in future studies focused on these varied areas of inquiry.

Conclusion

This report presents findings from the first study designed to investigate children's involvement in technology-facilitated abuse in the context of domestic and family violence. It study fills an important gap in the emerging research on the role of technology in domestic and family violence. The study collected data from multiple perspectives, using qualitative research with young and adult victims, professionals who work with domestic and family violence cases, and domestic and family violence perpetrators, as well as a survey of professionals.

Study findings provide valuable information about the dynamics and impact of technology-facilitated abuse involving children. Participants' varied perspectives provided a broad view of the abuse, including contexts where it is likely to occur, possible contributing factors and strategies for responding. This information can help inform resources, policy and practice to enhance the safety of domestic and family violence victims and help keep women and children safe online.

Our findings show that children are heavily involved in technology-facilitated domestic and family violence. Children experienced this abuse in two ways. Firstly, perpetrators directly abused children via monitoring and stalking, threats and intimidation, and blocked children's communication with supportive family and friends. Secondly, perpetrators also involved children in technology-facilitated abuse directed at their mothers. Professionals estimated that about a third of domestic and family violence cases involved technology-facilitated abuse of children, though professonals who work with families and children suggested a higher prevalence estimate than criminal justice professionals.

Monitoring and stalking behaviours were most common, with almost half of cases involving perpetrators using technology to try to learn about children's residential locations, asking children about adult victims' locations or activities and asking children for adult victims' phone numbers. Threats and intimidation were also common, with more than a third of cases involving perpetrators posting insulting messages about a child's other parent where they will see them, sending children messages that insult the other parent and demanding that children immediately answer calls and messages. A third of cases involved perpetrators blocking children's communication with the other parent. These types of abuse show how children are not just witnesses to domestic and family violence. Instead, they are at the centre of abusive behaviours and dynamics. This evidence suggests that interventions for technology-facilitated domestic and family violence should include children as well as adults.

Study findings show that technology-facilitated abuse involving children occurs as one part of an overall pattern of domestic and family violence. More than half of cases involved perpetrator threats to withhold child support and just under half of cases included blocking children's mothers' access to financial resources. This suggests that responses to technology-facilitated abuse of children must address abuse against adults as well.

This study documented serious harms to children from technology-facilitated abuse. Professionals reported that technology-facilitated abuse was detrimental to children's mental health, relationships with supportive friends and family, and disrupted children's activities in more than half of the cases.

Most of the abuse involved everyday technologies, such as mobile phones, text messages and social media services. GPS tracking was estimated to occur in over a third of cases. However, few study participants described cases where stand-alone

GPS tracking devices were used. The prevalence of abuse via everyday technologies highlights the unintentional risks associated with technologies designed for seamless consumer use. Perpetrators can easily misuse functions created to help people find lost devices, connect with friends, remember passwords and access accounts across multiple devices. These patterns require responses tailored to the complexity of abuse involving technologies. Also, the survey suggests that cameras and gaming devices may be important tools for perpetrators. Despite cameras being named in an early review of technology-facilitated abuse (Hand et al, 2009) little research has focused on these devices so far.

Evidence from this report suggests that children may be especially vulnerable to technology-facilitated abuse in the context of post-separation co-parenting. While technology reduced some risks associated with post-separation physical contact, it created new difficulties. Parents of young children struggled to balance supporting communication with perpetrators with children's safety. Older children's dependency on technology owned by perpetrators contributed to ongoing risks to the family.

In addition to documenting the dynamics of technology-facilitated abuse involving children, this study gathered information about strategies for responding to it. Blocking communication and replacing devices were among the most commonly discussed strategies. These strategies could not be used in all cases, such as where cutting off communication would lead to an escalation of the abuse. Blocking communication was not feasible when children were financially dependent on perpetrators, or non-abusive parents were facilitating communication between children and perpetrators voluntarily or by court order.

As the perpetrators' accounts show, some abusers continue technology-facilitated abuse despite legal orders. Perpetrators' failure to recognise technology-related behaviours as domestic and family violence poses great challenges for addressing this type of abuse. Nonetheless, addressing perpetrator behaviour is essential for prevention. However, study participants indicated that legal responses to technology-facilitated abuse could be helpful, especially where police and courts were able to recognise the domestic and family violence context and made use of electronic evidence.

The study also reveals what we don't yet know. Specific knowledge about how perpetrators gained unauthorised access to accounts and information was limited. While a significant portion of professionals mentioned spyware, the extent of the threat from clandestine spyware was unclear. Similarly, it wasn't clear how much of GPS-facilitated stalking was due to standalone devices. This type of information could be used to address future cyber security risks. Information about sexual abuse of children involving technology in the context of domestic and family violence was also lacking.

This study provided limited information about children's experiences in underserved communities such as survivors who are Aboriginal or Torres Strait Islander, CALD, disabled or live in rural or remote areas who reported additional and unique dynamics of abuse and barriers to receiving assistance. In these contexts, individual privacy approaches to cyber security can be unreasonable, unsafe or unhelpful. Additional research is needed to inform the development of appropriate resources to support children's safety in specific communities.

This study highlights the central role of children in technology-facilitated domestic and family violence. It represents the first attempt to foreground children's perspectives and experiences and provides a foundation for action to alleviate the harms of domestic and family violence, and decrease technology-facilitated abuse.

Appendix A: Detailed methodology

This study used a mixed-method approach to gather information about how children are involved in technology-facilitated abuse domestic and family violence situations. Professionals were asked questions about different forms of technology-facilitated abuse involving children from their experience, either working with clients or through other avenues (such as supervision of other staff).

The qualitative component of this study involved semi-structured interviews with children exposed to domestic and family violence, adult domestic and family violence survivors and domestic and family violence perpetrators. It also included focus groups with 13 practitioners who work with domestic violence cases involving children.

This study was reviewed and approved under two separate ethics applications. The interviews and focus groups were approved under Griffith University Human Research Ethics Committee Reference Number 2019/810. The survey was approved under Griffith University Human Research Ethics Committee Reference Number 2019/886.

1. Professionals who work with domestic and family violence cases

Survey

The research team conducted a national online survey of professionals who work with domestic and family violence survivors, victims or perpetrators. Participants were recruited via email invitations which were distributed by eSafety to their list of contacts who had previously attended an eSafety training session. eSafety also forwarded invitations to subscribers of eSafety Women. Additional invitations were sent from the research team to our own lists of domestic violence services.

The survey, which was developed by scholars from Griffith University in collaboration with eSafety research staff, commenced on 20 November 2019 and was completed on 17 January 2020, with 515 people providing useable data. It was designed to gather information from professionals who work with domestic violence cases about their knowledge of technology-facilitated abuse where it involves children. Using a mix of closed-ended and open-ended questions, we asked professionals about: the proportion of technology-facilitated abuse cases involving children; the types of abuse being seen; their assessment of the effects on children and the types of strategies used to protect children.

As noted in the report, a primary component of this study was an online survey of professionals who are in contact with domestic and family violence cases. This appendix provides details about the survey's participants, questions and administration, as well as information about how prevalence estimates were calculated.

Survey participants

As noted above, our sample of domestic and family violence professionals was sourced primarily through eSafety emails to potential participants who had previously attended eSafety training and as subscribers to eSafety Women. This primary group was

supplemented by participants sourced from emails sent to the research team's list of professional contacts. Email communications described the study and asked recipients to complete an online questionnaire. The link to the survey was not affiliated with individual email addresses, so those who received the invitation could forward the survey information to others who might be in a position to participate.

At the outset of the questionnaire, participants were asked, 'In your current role, do you know about the details of individual domestic and family violence cases through either: working directly with victims or offenders, reading case material, or through discussions with colleagues?' Those who answered that they didn't know about these details, and those who later answered that they didn't know whether any of their adult or child clients had experienced any type of technology-facilitated abuse were diverted from the main survey questions and excluded from our analyses.

Approximately 1,000 people visited the survey site prior to the 17 January 2020 cutoff date, although a number did not meet the inclusion criteria and others did not complete critical parts of the survey. After removing these, our final sample for this report consisted of 515 professional participants who provided usable data.

Measures

Our primary measures relate to the estimated prevalence of various forms of technology-facilitated abuse. These estimates were obtained through a series of closed-ended questions. Because prior research focused upon adult victims of technology-facilitated abuse, this survey focused on children's exposure to these events.

Number of domestic and family violence cases

Participants who stated that they knew about details of domestic or family violence cases (their own or their agency's) were subsequently asked, 'In the past 12 months, approximately how many domestic and family violence cases have you come to know about through either: working directly with victims or offenders, reading case material, or discussions with colleagues?' Participants were instructed to include in their answer all domestic and family violence cases involving adults or children regardless of whether they involve technology-facilitated abuse. We used the number of domestic and family violence cases for each participant as the base in the prevalence estimates discussed below.

Forms of technology-facilitated abuse

The main survey questions enquired about 41 separate forms of technology-facilitated abuse separated into seven different categories/groups. The survey included questions about forms of technology-facilitated abuse that were directed at children, forms of technology-facilitated abuse that could affect children indirectly but were aimed at a parent and other co-occurring forms of non-physical abuse. The survey did not include questions about physical violence.

For these question groups, the participants were asked, ‘In how many of your XXX cases of domestic and family violence do abusers use these behaviours?’ For groups of questions, the online instrument automatically ‘piped in’ (substituted for the XXX) the number of domestic and family violence cases previously provided by each survey participant. To simplify the answer choices, the provided answer categories were: ‘None,’ ‘1 or 2,’ ‘25%,’ ‘50%,’ ‘75%,’100% or almost 100%,’ ‘Unsure or Don’t Know.’

Prevalence estimates for forms of technology-facilitated abuse where a child was involved

For each form of technology-facilitated abuse that involved a child, we calculated approximate prevalence estimates by first multiplying the reported number of domestic and family violence cases by the percentage of those cases that involved that form of technology-facilitated abuse. We did this separately for all participants who answered the question unless they stated they were ‘Unsure or Don’t Know.’ We subsequently added these results across all participants and divided by the sum of the total number of domestic and family violence cases across the participants.

Participants who did not answer the question or those who stated that they were ‘Unsure or Don’t Know’ were excluded from both the numerator and dominator of the calculations. The resulting prevalence estimate for each form of technology-facilitated abuse is presented in our figures as a percentage based on the estimated total number of technology-facilitated abuse events involving children reported by all participants divided by the estimated total number of domestic and family violence cases across all participants.

Percentage of respondents who don’t know if technology-facilitated abuse occurred

For each form of technology-facilitated abuse, we calculated the percentage of participants who answered that they were ‘Unsure or Don’t Know’ how frequent technology-facilitated abuse was among their clients. We presented this information as a potentially useful indicator of how often domestic and family violence professionals currently screen for, or may otherwise know about, child-involved technology-facilitated abuse. These estimates are presented in the same figures as the prevalence estimates.

Frequency of technology-facilitated abuse cases involving children

After asking about each of the specific forms of child-involved technology-facilitated abuse, we asked the broader question about how many of each participants’ XXX domestic and family violence cases involved ‘any type of technology-facilitated abuse’ *and* involved children. As described previously, the number of domestic and family violence cases provided by each participant earlier in the survey was substituted for the XXX in the narrative above. We did this as another way to estimate the prevalence of technology-facilitated abuse involving children, and to provide a base for the device and platform misuse estimates, as well as the strategies question. We also used this

response to calculate the overall child-involved technology-facilitated abuse prevalence estimate. This is further detailed below.

Overall child-involved technology-facilitated abuse prevalence estimate

We subsequently used the child-involved technology-facilitated abuse response noted above to calculate an estimate of the overall child-involved technology-facilitated abuse prevalence. This was simply the total number of child-involved technology-facilitated abuse cases reported across all participants divided by the total number of domestic and family violence cases reported across all participants.

As before, those who did not answer these questions or stated that they did not know were not considered in the calculation. In addition, we calculated this overall estimate separately for each of the different roles (employment categories) the participants reported.

Device and platform misuse

We also asked participants about how often each of ten different devices have been used in abusive events. The devices were: mobile phones, landline phones, computers/laptops/tablets/iPads, smart toys, smart watches, fitness trackers, gaming devices, drones, cameras and GPS tracking devices. The answer categories differed depending upon the frequency of the abuse that each participant reported. For example, if the participant reported two child-involved technology-facilitated abuse events, the participant was asked whether ‘None’, ‘One’ or ‘Both’ of the two cases involved each of the ten devices. If the participant reported six or more events, they were asked whether ‘None’, ‘1 or 2’, ‘25%’, ‘50%’, ‘75%’ or ‘100 or almost 100%’ of their XXX child-involved technology-facilitated abuse events involved each device. Here, the total number of events was substituted for the XXX in the narrative above. Participants were also given the option of answering that they were unsure or ‘don’t know’.

We measured how often different platforms were used in abusive events in a manner very similar to the way device misuse was measured. The platforms we enquired about were: email, text/SMS, Facebook, Snapchat, Twitter, Instagram, spyware, cloud storage and smartphone instant messaging.

We calculated the estimated percentage of cases for device and platform misuse in the same way we calculated the prevalence estimates for specific types of technology-facilitated abuse events. For these, however, we used the number of technology-facilitated abuse cases involving children as the denominator.

Effects of technology-facilitated abuse on children

Toward the end of the survey we asked each participant, ‘In how many of the XXX child-involved technology-facilitated abuse cases you know about were the children impacted

in these ways?' We had seven impacts listed as sub-questions: 'Child was fearful', 'Child's mental health was affected', 'Child felt guilty she/he disclosed information', 'Child had sense of being constantly watched', 'Child became isolated from family and friends', 'Child's relationship with non-abusive parent was harmed' and 'Child's routine activities outside of the home were negatively affected.' The answer choices were handled in the same way as described in device and platform misuse.

Strategies to protect children

We asked each participant to estimate how often four different strategies had been used among the XXX child-involved technology-facilitated abuse cases they knew about (again, the total number of cases of involving children reported by each participant was substituted for the XXX in the narrative above). The strategies were: changing the child's phone number, email address or other account; blocking the abusive parent from access to the child's social media site; replacing the child's technology device and, stopping the child from using some technology. As in the measures above, we converted the answers to represent approximate prevalence figures.

Open-ended questions

Toward the end of the online questionnaire, we asked concluding open-ended questions seeking examples of how technology was used in the most serious case of which participants were aware, questions about useful resources and other related questions that provided participants the opportunity to share additional information from their experiences. Selected quotes and other information are included in the report.

Practitioner focus groups

The survey was supplemented by two focus groups to help better understand survey findings. Participants were recruited by email and phone calls to 121 organisations that provide services to children affected by domestic violence across Australia. We used follow-up phone calls to ensure a diverse range of services and geographic locations were included. Focus group participants included 13 practitioners from eight different organisations in Queensland, NSW, WA and Victoria.

2. Young people exposed to domestic and family violence

We interviewed four young people who had been exposed to technology-facilitated abuse in the context of domestic and family violence for this study. Two were male and two were female. One young woman had experienced technology-facilitated abuse against her mother and in her own relationship with her child's father. We recruited young people aged 14-17 to participate in interviews about their experiences with technology-facilitated abuse with assistance from Carinity, a counselling service for young people impacted by domestic and family violence. Interviews were conducted at Carinity's offices, a safe and familiar place for researchers to meet with the young people.

Young people were asked to give written consent in order to participate in the research. Given the age of the young people (14-17) they were able to give informed consent and viewed as the primary consenting agent. Aligned with Griffith Human Research Ethics Committee guidelines, based on the National Statement on Ethical Conduct in Human Research, the consent was addressed to the young person and countersigned by a protective parent/guardian. The language of the consent form was child-centred and the young people were spoken to in first person. The countersigning of the consent form by the protective parent (in this case, the mothers) was not to undermine child participation, but to acknowledge that participation in this research may contain some risks to young people. The interviews lasted under an hour. After completing interviews, young people were offered additional support if needed. All four interviews were recorded for transcription. Transcripts were de-identified, and participants were assigned pseudonyms. Interview transcripts were thematically coded using the computer assisted qualitative data analysis software NVIVO. Initial codes were then aggregated into larger themes.

3. Adult domestic and family violence survivors

Further interviews were held with 11 mothers whose children have experienced technology-facilitated abuse in the context of domestic violence. Eight were recruited with the assistance of Women's Legal Service Queensland (WLSQ). WLSQ staff referred cases that involved technology-facilitated abuse of children to a staff social worker who made initial contact with survivors using established safe communication protocols, shared information about the study and provided consent sheets. The social worker scheduled interviews and provided a safe contact number for researchers to use. Two additional women were recruited via Carinity, our community partner for the young people interviews, and one woman was recruited via direct contact from another survivor. All women participating were offered access to support via the WLSQ social worker after their interview. They also received $50 gift cards from a major supermarket chain as a token of appreciation for their time and to help offset costs.

This approach to recruitment enabled us to identify participants who were far enough removed from crisis situations to provide insight into their, and their children's, experiences with minimal risk to safety and wellbeing. Researchers used a co-designed grounding protocol with each survivor to establish mutually agreed processes in case participants became upset during the interview. Ten interviews were conducted via phone and one was in person. All were recorded for transcription. Transcripts were de-identified and participants assigned pseudonyms. Interview transcripts were thematically coded using the computer assisted qualitative data analysis software NVIVO. Initial codes were then aggregated into larger themes.

4. Domestic and family violence perpetrators

The research team also interviewed 11 men for this study. All were attending a Men's Behaviour Change Program (MBCP) in Queensland at the time of interview. Men had been referred to the MBCP because of a domestic violence order (DVO) or a pending court appearance. Interviews were transcribed and analysed for themes.

5. Limitations

This study had several limitations. Accessing the population of professionals who know about children's involvement in technology-facilitated abuse is not a straightforward proposition. Domestic violence cases cross many services and systems with diverse statutory mandates and understandings of abuse. Services designed to assist children affected by domestic violence are limited in number and under-resourced, making participation in research challenging for professionals. The small case load of our partner organisation and the requirement to select cases where it would be safe to speak to the children made it difficult to identify young people to participate in the study within the set timeline.

There are several limitations to our estimates about the extent of technology-facilitated abuse involving children. For example, figures are based on participants' perceptions of their workload (i.e. not actual counting of case files), the sample of professionals may not be representative of the sector and it is based on cases who had contact with the service or justice sectors. However, Table 1 provides the first attempt at a national estimate of the extent of child-involved technology-facilitated abuse in the context of domestic and family violence. Without a national database used by all organisations working with domestic and family violence cases, or a national victimisation survey, estimates from professionals provide the best opportunity to understand the extent of this type of abuse in Australia.

Another limitation was the tight timeline for this study – the period from tender to completion was seven months. While the research team was able to draw upon existing relationships with services to complete the study, many domestic violence services are overburdened with research requests, especially for surveys. The burden is multiplied for Aboriginal and Torres Strait Islander, Culturally and Linguistically Diverse, and disability services assisting domestic violence survivors, which are few in number and unable to meet requests for service from survivors due to inadequate resourcing. Accordingly, our sample did not include as many young people or professionals providing specialised Aboriginal and Torres Strait Islander, Culturally and Linguistically Diverse, and disability services as we would have liked. Future collaborative research with more generous timelines will be needed to learn more about the experiences of survivors in these communities. While the study findings are not able to be generalised in a statistical sense, they align in significant ways with the existing research on technology-facilitated abuse and child involvement in coercive control. Our use of mixed methods rectifies some of the shortcomings of quantitative-only studies of domestic violence, providing valuable context which helps in interpreting survey findings.

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