



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

MA Dissertation
BM CJ7004

Understanding whether or not the general public are aware of the power that technology and social media can hold and in particular assist those perpetrators of Domestic Violence.

Jennifer Selby

March 12th 2021

DECLARATION

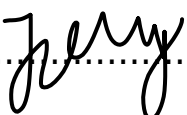
This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed  (candidate)

Date ..03/03/2021.....

STATEMENT 1

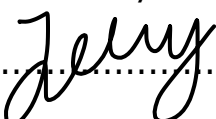
This thesis is the result of my own investigations, except where otherwise stated. Where correction services have been used the extent and nature of the correction is clearly marked in a footnote(s). Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

Signed  (candidate)

Date ...03/03/2021.....

STATEMENT 2

I hereby give consent for my thesis, if accepted, to be available for deposit in the University's digital repository.

Signed  (candidate)

Date .03/03/2021.....

Acknowledgements:

I would like to take this opportunity to thank some people for their advice and guidance on helping me complete this research.

Firstly, I would like to thank my wonderful family, especially my Dad, Ray Selby who has supported me from day one and my Mum, Pauline Selby who kept me motivated.

Secondly, I want to thank all my colleagues for encouraging me to keep going, even on the night shifts!

Thirdly, my partner, Wil Jewell who also supported me and proofread this countless times for me.

And finally, anyone else who took part and helped with the research of this study, it has been greatly appreciated.

Contents page

Cover Page	Pg.1
Declaration sheet.....	Pg.2
Acknowledgements.....	Pg.3
Contents page.....	Pg.4
Tables and pages.....	Pg.5
Abstract.....	Pg.6
Introduction.....	Pg.7-12
Literature Review.....	Pg. 13-21
Methodology.....	Pg. 22-24
Analysis.....	Pg. 25-35
Conclusions and Recommendation.....	Pg.36-40
Appendix.....	Pg. 41-47
References.....	Pg. 48-52

Tables and pages

The following tables and graphs used to display findings can be found on the pages given below

Graph 1.1 - Demographic of respondents Pg.25

Graph 1.2 – Acting safely and with privacy on social media.....Pg.27

Graph 1.3 – How often is a smart device used?.....Pg.28

Graph 1.4 – Awareness of tracking features?.....Pg.29

Graph 1.5 – With whom tracking information is shared?.....Pg.30

Graph 1.6 – Sharing or saving of any personal information.....Pg.34

Graph 1.7 – What social media do you use?.....Pg.34

Graph 1.8 – Use of Privacy settings.....Pg.35

Graph 1.9 – Updating privacy settings.....Pg.35

Abstract

This thesis aims to understand how the public are acting when it comes to using social media and other internet enabled devices. This will be done by challenging them through a series of questions in a survey and the in turn developing those answers into data. The reason for this choice is to understand whether or not the public when accessing the internet are understanding of the risks that could come associated with this. For the purpose of this thesis the risk to be examined will be that of a domestic violence perpetrator. The choice for this risk to be examined will be supported by analysing already published literature and using case studies that will highlight what the consequences can be for not being aware of the power of technology yet also using a case study to highlight the importance and benefit of technology in these scenarios. Brief consideration will also be given to the role that emergency services already play in this role and how aware are the public when it comes to their role?

Introduction

The chosen topic for this research is to examine what the awareness of the general public is when it comes to using social media and GPS or internet enabled devices and would they know how to safeguard themselves. This is for the purpose of understanding whether or not the use of these devices and little to no security has a direct correlation to offences being committed by domestic violence perpetrators. This area has been chosen as the growing use and development of technology has meant that more research is being carried out in this area, but does this mean that it has raised public awareness on the matter and are the general public taking precautions to safeguard themselves or not? And if so, what is the reasoning for this. This thesis will look into the problem of technology and domestic violence in the first instance before moving on to examine the knowledge of the general public through the means of a survey before analysing the data and drawing a conclusion on whether or not, based on survey results the general public are conscious enough about the power of technology and social media and just what it can be used for if in the hands of the wrong person.

According to the UK government the definition of Domestic Violence or abuse is set out as follows; *“any incident or pattern of incidents of controlling, coercive, threatening behaviour, violence or abuse between those aged 16 or over who are, or have been, intimate partners or family members regardless of gender or sexuality. The abuse can encompass, but is not limited to psychological, physical, sexual, financial or emotional”* (2020).

Additionally, the National Domestic Abuse helpline mentions all the forms of abuse within the government definition, however, it goes on to also to discuss another form of abuse - ‘Tech Abuse’. The helpline identifies that this is a form of abuse which can involve the use of ‘abusive text messages’ or ‘demanding access to devices’ which can then be to be used as a form of control. ‘Tech abuse’ is also described an opportunity for perpetrators of domestic violence to stalk, isolate and control women using tools which are now in everyday life, going on to mention that it is not just limited to the individual experiencing the abuse but can be used to target an individual’s immediate family such as children. Further to this, it was also stated that this form of abuse can for the perpetrator take on the feeling of being ‘omnipresent’ – they are there and always watching (Woodlock, 2016). However, whilst it is being described as being a separate form of abuse, it can be argued it is still recognised in the law as although carried out remotely

the abuse it still having a psychological effect on the victim, thus surely making it a form of 'emotional abuse' still (Gordon, 2020). Although could the growing concerns surrounding this area mean that the law will have to adapt to this?

In a report published in 2017 as part of the charity event Comic Relief (Comicrelief.com) titled '*Tech v Abuse*' it was stated that within the United Kingdom each year over 2 million individuals are at risk of abuse and out of that staggering figure around 100,000 of those individuals are at risk of being murdered. Within the report that was conducted it was found that 90% of the practitioners believed that technology proved to be a risk and it was not fully understood how it can be utilised as a tool of safety (Snook, Chayn & SafeLives, 2017). However, the report did also go on to explain that since 2016 there has been an improvement in digital solutions available for those at risk, with the figure in 2019 being estimated at being over 90 and that with the development of digital solutions comes greater awareness and recognition of the risks that these could pose. (Snook & SafeLives, 2019).

Domestic violence is an ever-increasing problem and there is a lot to understand. However, in relation to the research being conducted for this thesis it will also need to be understood how big is exactly technology and social media within society currently and how much does this take up our everyday lives?

It was estimated that in 2019 alone the average person would be spending around 144 minutes (or 2 hours and 24 minutes) each day using various social media platforms, this being an hour increase in daily use compared to the average time spent in 2012 (Broadbandsearch.net). This example of statistics shows the growth and how much importance that the role of social media and technology has within our day to day lives and this is more than likely only on the increase, and more over with this increase what are the risks that are associated with this? For example, in an article by Coyne, Rogers, Zurcher, Stockdale and Booth (2019) it was found that an increase in technological use among younger generations leads to greater risk of mental health diagnosis such as Depression.

Furthermore, in 2020 it was estimated that based on the average lifespan of an adult – (which is currently estimated to be 72 years of age) the World Health Organisation (shortened to WHO), that the average person will spend 6 years and 8 months of their life online (Broadbandsearch.com, 2020). These statistics of course are only representative based on what we have available to us now leaving this wide open to change in years to come. Therefore, when

considering the risks that technology and social media pose to those who could be at danger of domestic violence and coercive control, it needs to be considered what is there accessible now to safeguard those before the problem grows and, in some circumstances, becomes too late.

Developing a brief understanding of the type of behaviours that make up domestic abuse and coercive controlling behaviour and understanding then how much of a reliance of technology and social media hold within contemporary society it now needs to be understood what exactly technology and social media allow for that in turn then allows this type of behaviour to manifest. It should also be understood how many people are being affected by this behaviour and what is being done to help them prevent and protect themselves and or their loved ones? Therefore, the next step to this research will address this. Understanding of the issue has initially been covered, however, this research needs to delve further into the matter of social media and domestic abuse relevant cases which when put together may demonstrate how the growing use of technology and social media can be used to control or 'stalk' those potential victims of domestic violence.

Firstly, this will be understood through a detailed discussion of the offence of domestic violence and coupled with the use of technology and the application of appropriate case studies. There will also be a discussion in what the growth of technology and more specifically that of social media can do for victims of domestic violence (i.e., are safeguarding methods staying current?). Discussing this and building a picture of it can then allow for this to be challenged with a survey. The survey will be marketed towards members of the public (no more than 100 participants). These participants are not going to necessarily be victims of domestic violence (although it cannot be ruled out) are hopefully going to be from a range of backgrounds (age, gender etc) The decision to focus upon one type of group is because it should be remembered that anyone could become a victim themselves at any time. The survey will be developed in such a way that will allow for the public will not suggest the topic and will therefore allow for questions to be aimed at testing their knowledge of social media and technology safety. The idea of doing it this way without any suggestion of the survey being related to the topic of domestic violence will hopefully give the most accurate insight into the way in which members of the public perceive social media and internet enabled devices – for example, do they see them as dangerous or do they see them in the complete opposite – are they very useful?

The use of qualitative questions will then generate quantitative data that will inform the study of how safe the participants consider themselves to be online and when using internet enabled devices and as a result inform the thesis of how social media and internet enabled devices can be utilised by a potential domestic violence perpetrator. Whilst this in turn, may perhaps highlight some of the ways to safeguard (such as including examples of some apps or digital content that has been designed for this purpose). The survey, by also asking participants to disclose their age grouping and gender, the survey may be also having the ability to identify who is the most 'at risk' group, therefore resulting in perhaps leaving room for future analysis to be conducted that may identify why this could be the case?

However, it is worth noting, the survey will only provide results which reflect only a fraction of the percentage of the British population. Therefore, it would then need to be developed further by analysing already published data from organisations such as Domestic Violence charity groups or public service bodies such as that of police forces in England and Wales (this can be done by comparing what has already been published in previous reports and publications to that of the findings in the survey of this thesis). By conducting this research, the theory is that by the end of the research there will be a strong critical analysis that delivers an understanding as whether or not advancements in technology and what they can now be used for are responsible for creating further victims of domestic abusive or coercive controlling behaviour, and is there enough awareness for the public surrounding this matter that can counter react this?

In order to establish what the survey sets out to achieve, then it will need to be looked into what questions need to be asked in order to achieve the answers that are required to inform the research, this is important as the use of good quality questions will result in good quality answers being provided (Dolnicar, 2013).

Questions will include the following: asking those partaking within the study how much technology is involved within their everyday life, are they aware of their privacy and location settings, how much are family members or close ones able to access their devices either remotely or not? The aim by asking these questions it is hoping that a picture will be created of the understanding of people's knowledge when it comes to safeguarding themselves whilst using modern day technology. In addition to carrying out this research there will be by comparisons of the findings developed from the questionnaire to the literature that is already

published on the subject. The aim is to then build an analysis of what organisations and the public understand of 'tech abuse' and what can be done when someone comes forward to report this abuse?

By doing all of the aforementioned it can be assumed that a picture can be built of what the understanding is of technology and its consequences can be and what organisations are able to do in preventing and protecting those that should fall victim to such.

Moving on from understanding how the research will be conducted, the next thing that needs to be considered is what are the limitations or perhaps ethical issues that could arise from carrying out this research? Understanding what ethical issues, if any, there are prior to conducting research is important to know if the study is right to be undertaking in the first place. For example, within western society today some of the biggest ethical challenges that can be faced are the ensuring of anonymity and the right to confidentiality (Behi & Nolan, 1995).

Understanding and ensuring there are no ethical issues will ensure the research is a success, these issues will be discussed further within the methodology section of this thesis.

One of the main reasons to why that of a survey was chosen as the method of research was how accessible it was going to be for the participant audience to complete within a fixed timeframe. Another reason that this method of research was chosen was due to the, ongoing Coronavirus pandemic. This has had an impact on the ability to carry out certain types of research with many restrictions and social distancing guidelines in place for the foreseeable future. At the time of writing and whilst research was being conducted Wales & England were in a 'Tier 4 lockdown' – this meant that it was advised that 'stay at home' was followed at all times and your home should only be left for the following reasons: to conduct shopping for yourself or a vulnerable person and shopping was to be of essential items only, to keep contact to only your household members and to only go to work if working from home cannot be done (Gov.co.uk, 2021). The survey will also give the opportunity for those who are partaking to remain completely anonymous and only disclose their age range and gender.

Therefore, with regards to this research it is fair to say there are very few ethical issues to be considered that could impact the research from being carried out due to the afore mentioned reasons.

In order to successfully complete this research and to meet the deadlines that are set for the thesis then the following will be required; there will need to be access to the internet, access to journal articles and other literature resources such as news articles or books to be able to successfully evaluate and provide a discussion. Access to these sources will be obtained by using the online university library and other search facilities such as 'Google Scholar' (scholar.google.co.uk, 2021) Finally, for the purpose of the survey, this will be completed and conducted using the online platform known as 'Google Surveys' (marketingplatform.google.com, 2021). By using this platform, it ensures that a survey can be created and customised to suit the researcher and allow for easy access to participants by sharing out a dedicated web link (for example via social media) that will allow for the participant whenever and wherever they may be to complete it at their convenience.

When considering the time constraints, working to a deadline of January 2021 will be sufficient time in order to conduct the research and compile the data from them – this will be done by creating and sending out the survey no later than October 2020 and aiming to receive all responses back by earliest - November 2020 and latest December 2020. Furthermore, careful time management will allow for the findings and resources to be evaluated and compiled with findings and literature review being completed in time for an initial January 2021 deadline.

To conclude this introduction, it has been discussed what the desired outcome for this research will be and how that will be achieved has been discussed in detail. The limitations and ethical issues have been considered and an understanding of how the research will be carried out has also been mentioned coupled with timeframes. Hopefully, by the end of this research, whether or not an answer to the thesis question has been found or not, there will hopefully be strong evidence of research into a contemporary issue within society that needs addressing.

Literature review

Coming back to what this thesis aims to achieve, a brief reminder of what the research objectives are again for this section is beneficial to the reader. This thesis is wanting to uncover how safe members of the public perceive themselves to be when using social media or internet enabled devices. The reason for this is to then in turn understand whether or not there is greater risk from domestic violence perpetrators if safety is not seemingly a priority when it comes to using social media or browsing the internet.

“The whole goal of escaping an abuser is to do just that, escape. After one has gone through the trauma of leaving...how horrifying it is to wake up to the reality that you can’t escape at all. The internet doesn’t hide anyone.” (Southworth, Dawson, Fraser & Tucker, 2005).

The above quote is pivotal to the research of this thesis, it signifies that technology means that the victim is unable to escape their abuser due this omnipresence that new technology allows for. Within this literature review it will be understood the importance of technology and social media within society today and then it will be analysed what are the already known effects of technology and social media on victims of Domestic Violence and Coercive Control? Further to this, it will also be examined what are the potential benefits to technology for victims. Case studies will also be looked into to support this, including the case study of Alice Ruggles in order to understand how the use of technology impacted upon this. By using case studies and researching their effects it will help to understand the dangers that tech can potentially pose – if it does at all.

In order to understand the impact technology can have upon those, it firstly needs to be understood the scale of technology within society today, and what exactly the lengths that technology can achieve, especially should it fall into the hands of a domestic violence perpetrator.

According to the book ‘Media Now’ (Straubhaar, LaRose & Davenport, 2015). – media has become a matter that is consumed within everyday life and if we are not consuming the

information then we are contributing to it. They go on to explain that contributions can involve simple tasks such as updating your profile picture of Facebook or uploading a video onto YouTube. Furthermore, there has also been a significant increase in the use of the Global Positioning System or as it is more commonly known GPS, with a 2013 study being conducted on the increasing use of technology in the workplace and uncovering that around 70% of adults are becoming 'disengaged' from their workplace and therefore counterproductive as a result of this (Rensburg, 2017).

There was also an article published by the Washington Post (2017) which highlights the growth in the variety of technological products since the 1990s. From the use of CDs to the changes in mobile phones all the way up to the smartphone. This small bit of information gives a brief insight into how fast technology is changing and growing. To display this further, drawing upon reviews of 2 mobile phones made by the same company (Apple Inc) that were sold 13 years apart the rapidly changing growth is displayed perfectly. For example, in the 2007 review titled '*Apple iPhone (8GB)*' it was stated the phones positive aspects were the 3.5-inch touchscreen, its WIFI compatibility and the 2MP camera (Wolpin, 2007). Whereas this compared to the 2020 review titled '*Apple iPhone 12 Pro Max review: the camera you want, in a size you can't handle*' it was found that the major selling points of the phone were the '*large and beautiful display*', the long battery life and the '*top-notch*' camera (Martonik, 2020). 13 years may seem like a lot but in terms of the growth seen however, it can only be imagined what another 13 years of technology may produce and more so what could that be capable of doing or not doing for domestic violence offenders out there?

Another interesting point that is worth mentioning was that it was also noted that within society today, Ofcom reports that 16-24-year olds are now spending around 27 hours online each week and there are questions being asked as to whether or not this is starting to impact the social interaction of younger generations and future generations to come (Fothergill, 2016). Although, whilst it is interesting to consider this it can be said that is simply the way in which society now is and this is only going to grow and develop further as time goes on.

Technology is now simply becoming a way of life. For example, The Independent has been looking into and discussing that organisations such as the Police are going to soon be able to predict patterns of crime and target where it is going to take place (Dearden, 2017). This idea of using technology seems like an incredible development for the likes of emergency services.

However, by doing this and anticipating where crime may occur with technology and targeting it before anything else happens does not necessarily mean that it could work. In order to understand why this is, the theory of '*Broken Windows*' by sociologists Wilson and Kelling can be discussed. Essentially the '*Broken Windows theory*' argues that if a building was to have a broken window and be continuously damaged until it was left in a state of disrepair then soon other windows on buildings in the area would be broken thus creating a pattern. Should this then be fixed the problem will inevitably just move elsewhere, therefore creating the argument that no matter if you focus on one area the problem will just move elsewhere. Could this ring true for emergency services trying to use technology to predict areas of crime with the hope that it could see a reduction? However, it is worth noting that with crime being utilised for means of reduction, despite comparison to already published theories – could emergency services adapting new methods of technology also mean that the offence of domestic violence and coercive control may see changes that can help the victim for the greater good? This is certainly an interesting point and is worth remembering.

Now it has been discussed what the growth in technology in contemporary society has done and could do next it now needs to be discussed what is the exact scale of the problem of technology and domestic violence together before it can be examined what is being done to tackle this or as this thesis aims to uncover – challenging the public on their understanding of device and internet safety to see if this could be a factor in the ability for these offences to be committed.

Woodlock et al (2018) stated that the use of technology within in domestic violence or coercively controlled relationships allow for the facilitation of control/ intimidation / and micromanagement of the female victim, although this in itself is an interesting statement to make as it gives no mention to male victims of domestic violence or is there simply not enough data on the way in which male victims are made to feel as a result of technology? In an experimental study carried out by Andy Greenberg from the publication '*WIRED*' he decided to test how easy it was to be tracked or controlled using his own phone. His wife took his phone each day and without seeing what she was doing made small changes to settings on his installed applications. By doing so, over the next few days she was able to track her husband's location with no effect on his phone for him to be able to tell (2019). Whilst this study was conducted with the author (Greenberg) being the victim and his wife being the perpetrator it does show how easy it can be for anyone either male or female to carry out this form of control despite

there being publications that focus just on the 'female victim'. Coming back to journal article by Woodlock it goes on to discuss that Digital Coercive Control is now a form of abuse that is recognised by Domestic Violence worldwide (in the United Kingdom, Women Aid) It is believed that this form of abuse could actually result in domestic homicide and is often as aspect that is overlooked by police, judicial systems and social services. Furthermore, it can also be argued that technology now allows for 'social convergence' and 'ubiquity' that enables perpetrators a new form of control. This meaning that control can now be expanded beyond spatial boundaries and can allow for new forms of digital/physical stalking. For example, if a victim was to post an update to their social media account, i.e., Facebook allows for the 'user' to 'check in' to where they are or allow for an update to state what they are currently up to. This then allows for a perpetrator to then track location and continue to exercise control over their victim. On top of this, victims of domestic violence through the means of technology describe it as 'more immediate and personal' and that it 'gets into your head' (Dragiewicz, Burgess, Matamoros-Fernandez et al, 2018).

One example of a form of abuse that technology can be used in is known as 'revenge porn'. Revenge porn is classed as when *"a person uploads nude/semi-nude photos of someone online usually as revenge after a relationship has ended"* it can also be classed as 'non-consensual pornography'. This form of abuse can have a detrimental impact on the mental wellbeing of the victim. Whilst there are various media and online communities out there that publish types of 'risk management' that is advice to safeguard a potential victim of this behaviour it does however appear to take the approach of 'victim blaming' – that is the victim is responsible for these photos or other forms of digital content being created therefore they are the ones that should be taking the necessary precautions to minimise the risk of there private and intimate thoughts and evidence being exposed online (Bates, 2016).

However, it should be considered that *'technology is a double-edged sword'* as it has the potential to be able to help as well as create chaos. In a report by Al-Alosi (2020) it was established that female victims are likely to suffer reputational damage i.e., intimate pictures or videos being exposed online with it further being found that the UN broadband Commission for digital development estimates that a total of 73% of female victims have endured abuse online. However, Al-Alosi goes on to also mention the benefits of technology for victims of domestic violence. For example, technology can reduce feelings of isolation and technology can also act

as a safety barrier for victims enabling them to record and collect evidence of abuse through the means of various apps or even by getting through to emergency services without having to speak. Some examples of these applications include the following: Bright sky by Hestia – this was an application which was designed to look like a weather app but allows the user to input diary entries which then in turn get uploaded to a safe space so they are not stored on the actual device should it become compromised (Hesita.org, 2021). Another example of an application used to assist is that of 'Hollie Guard'. This application was designed by a trust following the death of Hollie Gazzard (which is discussed later on within this chapter) The app essentially acts like a safety alarm but comes equipped with other useful tips for those who download. Its primary function however is to allow the user to upload 'emergency contacts' and when the alarm function is activated it not only alerts them but can also activate video and audio recording without it being obvious. These growths in technology are great developments for those that could be at risk from domestic violence however it needs to be considered that there are also risks that may be associated with such applications. For example, should the offender of this type of behaviour gain access to the victim's phone, are there going to be enough measures in place to prevent them seeing what these apps do and prevent them questioning or perhaps doing worse to the person at risk? For example, Bright Sky by Hestia can easily be read about by doing a quick input into an internet search engine and further to this their website actually advises not to download the app if the victim suspect their phone may be monitored – is there any way of a victim being able to tell this if it was done by the 'tech savvy' individual under extremely covert circumstances?

Although, it is also worth noting that applications are not the only form of technological advancement that has been established to help those at risk from a domestic violence perpetrator. In a BBC News article, it was established that those who are need of emergency aid but are unable to speak can dial 999 and then when asked what service they would require by the operator they can 'press 55' on their keypad, this then informs the emergency operator that the person on the other end of the line is in danger and requires assistance but is unable to speak, by pressing '55' the operator will know and transfer the caller through to the police advising the police call handler that '55' has been pressed and location details can be provided (Lincolnshire police, 2021). This initiative came into place following the death of Kerry Power from Plymouth who shortly before dying had dialled 999 but because she was unable to speak, she was therefore transferred incorrectly by the operator meaning the police we're not aware

of her cry for help and as a result were unable to save her. The 'Dial 55 solution' was a key development for the police, there are on average around 20,000 999 calls made each day. 5000 of those calls are silent and are transferred to the 'silent solution' system where it is determined whether or not that call needs to be transferred to the police or can be terminated then and there. Of those 5000 calls, 1% have the 'Dial 55' detected (policeconduct.gov.uk., 2019). Could this be down to the fact that there is not enough awareness surrounding this and how it works? This is certainly an interesting factor that could be challenged and looked into further.

Therefore, with technology developing at the rate that it is, and the development of smart phone applications and emergency service initiatives, it can only be imagined what there is yet to come in future that may help those who are at risk. Will 'Silent Solution/ Dial 55' remain or does the growth and expansion in technology each day leave the door open for further systems to be developed.

From understanding the use of technology within society and in particular drawing a focus upon what has been designed and how it can be used to help those who are victim's domestic violence and coercive control. It now needs to be examined exactly how successful technology is viewed in aiding those that require it for this purpose.

Coming back to the afore mentioned report of 'Tech v Abuse' it was examined within this that the majority of victims that participated found technology to have a positive impact upon their lives. It was discussed that the creation of Facebook support groups helped women to connect and share experiences with other victims of abuse. However, whilst the report established that there were positives reactions to the use of technology it did also acknowledge within the report the negatives that it brings. It was uncovered that 1 in 5 women were victims of being monitored, tracked through the use of social media accounts, internet searches and even online banking. Further to this, 47% of women stated that they were monitored and up to 48% found that this happened to them after they had removed themselves from the relationships. The report also took into account the viewpoint of practioners that helped those who are victims of domestic violence and a survey of 307 practioners uncovered that over 60% strongly agreed that technology can be used to harass and caused further abuse and over 90% agreeing that it can used in this way.

There are two examples of cases where technology has meant that charities has been set up as a result and with the aim of bringing awareness to the negative aspects and also highlighting how to safeguard oneself. The first case to be discussed is that of Alice Ruggles and the second case to be looked into is that of Hollie Gazzard. Both were victims of domestic violence as a result of their ex-partners.

Alice Ruggles was murdered on the 12th of October 2016 by her ex-boyfriend, Trimaan Dhillon. Dhillon was sentenced to serve a minimum tariff of 22 years on the 26th April 2017 for this crime. In a news article by the BBC, it was disclosed that Dhillon had been stalking Alice prior to his decision to end her life, he had done this by using various spyware to hack into her social media accounts and had also threatened to release private intimate photos of her when she wanted to end the relationship. The article also went on to mention that despite Alice contacting the police various times not enough was done to ensure that this was prevented. In fact, an officer even spoke to the Army barracks where Dhillon was based and even though he was warned to stop contacting her or face arrest Dhillon continued unnoticed (Doughty, 2020).

Following on from the death of Alice, it was decided by her parents that the 'Alice Ruggles Trust' was to be developed following her death and by accessing the website or getting in contact with the trust you will find a plethora of helpful information and advice for those who are either victim of stalking or what to do to raise awareness of the issue and to prevent stalking from occurring in the first instance. For example, they list on their website over 10 different ways to identify if someone is exhibiting stalking or controlling behaviour – this includes, the leaving of unwanted gifts, spying and tracking movements, monitoring online activity or hacking into social media accounts to name just a few.

The website also offers advice on how to safeguard your social media presence by giving advice on how social media accounts could still be at risk of hacking even if passwords have been changed (Alicerugglestrust.org, 2020).

As a result of the Alice Ruggles case, a Domestic Homicide Review carried out by the Gateshead Community Safety Board in 2018, it was found that there were more than several recommendation's that were made in order to better safeguard future potential victims from a death like Alice Ruggles reoccurring again. Some of their recommendation's based on their findings were as follows: The Home Office was to review the 101 non-emergency number and

implement measures in order to reduce waiting times – this was based on the fact that Alice had contacted 101 about Dhillon on a few occasions, however she had decided to abandon one of the calls because she was waiting for a considerable amount of time. Another was to have the Home Office look into working with Telecommunication providers and National Stalking experts in order to understand and take measures to reduce harm from digitally assisted stalking, and finally, the Ministry of Defence to record any domestic related allegations made against any service personal. Since 2018 have any of these changes based off this inquiry been undertaken. There were 17 further recommendations that were made in the report in which the Home Office, Ministry of Defence and the Police could start doing in order to prevent similar crimes from happening in the future. There has been no clear updated review as of yet to see whether or not these recommendations have been put into place, but one thing is certain that another case like this would be incredibly damaging to the reputation of these organisations. Another thing that is worth considering as to why major changes may yet to be seen could be down to the Coronavirus pandemic (which has been mentioned in other areas of this thesis) that has created effectively a halt on many services and procedures due to the nationwide lockdown.

The second case which will also be discussed in relation to this thesis, is the case of Hollie Gazzard. Similar to that of Alice Ruggles, in the sense that a tragic event led to a creation of a trust that as afore mentioned contributed on the technological front to try and combat this awful behaviour from occurring.

Hollie Gazzard was a hairdresser from Gloucestershire and was working when her ex-partner, Asher Maslin (then aged 22) entered into the salon and stabbed her a total of 15 times following a breakdown in their relationship, leaving those within the salon in complete shock and unable to intervene on the basis that Maslin was threatening others with the knife should they try to assist. Sadly, Hollie did not survive and 2 hours after being taken from the salon to the hospital she succumbed to her injuries. It was also found during an inquest into the death of Hollie that the local force had made failures when it came to protecting her and as a result of this there was investigations into members of staff and officers (BBC, 2014).

As previously mentioned, this case does make for a good example in relation to this thesis based on what Hollie's parents decided to do following on from this tragic event. They decided to set up the 'Hollie Gazzard Trust' which within this included the 'Hollie Guard app' (which was

discussed earlier on in this thesis). The parents decided that the trust should be created in order to continue the legacy of Hollie, with one of the aims of the trust being that it would help to train and fund hairdressers as this was a career that Hollie was incredibly passionate about (Holliegazzard.org, 2021).

In summary, this literature review chapter has developed a discussion surrounding the foothold and importance technology has within society at the moment and the growth it has had over the years to then applying this to the offence of domestic violence and coercive controlling behaviour in order to develop a picture of how this can affect those who are already at risk or could become a risk. The use of two cases has further highlighted the dangers of technology in this sense however it did also highlight what can result from a tragedy, in the case of the Hollie Gazzard trust or the Alice Ruggles trust.

From understanding the use of technology within everyday life and understanding how it is used to either assist perpetrators in carrying out domestic violence and coercive control offences or on the flipside how it can be used to help those who are victims of this behaviour either during the time they are with the perpetrator or after they have managed to remove themselves from the situation it now needs to be understood what are the general public understanding of technology and safeguarding themselves against these offences

Methodology

The purpose of this study is to determine whether or not members of the public when using social media and/or the internet are aware of how safe in which they are acting in order to understand whether knowledge of safety and the use of technology and social media versus no safety and the use contributes towards domestic violence and coercive controlling behaviour to be facilitated. To develop an understanding of this through the means of research proved to initially be difficult. The reasons for this is initially it was considered that the best means of research would be victim interviews and working alongside Domestic Violence agencies and support groups to gain an in depth understanding of the use of technology. However, due to the Covid-19 Pandemic this has not been possible.

The Covid-19 Pandemic began in December 2019 after clusters of cases of Pneumonia were seen in China, seemingly being caused by at the time what was an 'unknown virus'. This has since been developed to now become the 'Novel Coronavirus' or 'SARS Cov-2' and has become a worldwide pandemic leading to changes in the norms and values of everyday life in society today (WHO, 2020). Within the United Kingdom, from March 2020 onwards there has been lockdown measures put in place to reduce infection rates and the rule of three applies; wash hands, cover face, and make space. With various areas also being placed into 'local lockdowns' and deeming that only essential journeys to be made (GOV UK). This has therefore meant that carrying out research has been made difficult to arrange. It was therefore decided that the best way to conduct the research for this study was in the form of a questionnaire that would be easily accessible online. This then allows for a wide target audience to be reached and further flexibility when it comes to time constraints.

From what has been discussed so far within the literature review section to this dissertation the advantages and disadvantages of the uses of technology have been discussed, it therefore needs to be determined how accurate this discussion has been by presenting a set of questions to the general public which will aim to either present that technology is more of a risk to those who could find themselves in a domestic violence and coercive controlling scenario or prove it to be the complete opposite. Questions that will be asked will aim to develop the general public's knowledge of tracking features and security on social media and technological devices

and also probe the public on knowledge of features that are already in place with the aim to safeguard an individual against this type of behaviour.

Why the general public?

One obstacle of conducting qualitative research has been discussed prior, however it can now be discussed why the general public were chosen as the basis for the questionnaire over sending out the surveys compared to those who are victims of domestic violence themselves or are professionals in the area. The main decision behind this is that anyone from the general public can become a victim of Domestic Violence and Coercive Control at any given time. There are no particular characteristics that one should have or behaviours that one carries out that make them more likely to become a victim. This behaviour can be targeted at anyone at any time and therefore by surveying the general public will enable a fairly accurate picture to be developed on whether the hypothesis of technology and social media contributing to Domestic violence behaviour or not.

Another area that will be covered by the survey is that of awareness with regards to safeguarding opportunities. By this, it will be asked within the survey if the person answering the questions is aware of particular apps and security that can help someone in a domestic violence and coercive controlling scenario. The aim of doing this is 1) It will test the awareness of those partaking to see what they know is readily available to them and 2) should the respondent not be already aware of what is out there specifically designed to help those who are at risk or suffering, this will hopefully bring knowledge of that.

The safeguarding applications/software that will be mentioned to those partaking includes the following: Bright Sky – this is an app designed by the company ‘Hestia’. The app or website is designed for those who could be concerned for a loved one at risk of domestic abuse or someone who themselves may be a victim of it. The app was launched in partnership with the network provider – Vodafone and helps those at risk by allowing access to questionnaires that will assess one’s safety, advice for support and a directory of numbers that can help someone should they require it (Hestia.org, 2021) The second application that will be mentioned within the survey is that of – ‘Hollie Guard’. This application is described as ‘...a next generation smartphone app that provides enhanced levels of protection’ (Holliegazzard.org, 2021). The app was designed following the death of Hollie Gazzard who was stalked by her ex-partner who then brutally killed her while she was at work. The app operates with allowing 2 types of alert levels.

It can allow for both a 'discreet alert' or a 'deterrent alert' which both allow for audio and video recording of incidents and by setting up 'emergency contacts' within the app will allow for alerts to be sent out. These two apps were included specifically with regards to the domestic violence aspect of technology. From including these two apps it will give an insight into the knowledge of the general public about what is available for them if they were to require it.

As well as these apps being mentioned there was the decision to include other apps that are focused on location and help. One of these apps was 'What3Words'. This app describes itself as being a location app that has 'divided the world into 3 metre squares', by simply downloading the app you can learn your location rural or urban by the app generating 3 words. These words can be passed on to the emergency services should it be required and can assist in pinpointing to your location seamlessly (What3Words.com, 2021).

Further to this, with the mention of safeguarding apps either domestic violence related or not the, another aim of the survey will be to ask questions directly relating to the emergency services and whether there is enough awareness around applications to help get in contact with them or not.

Finally, the survey will then aim to understand whether or not from taking part in answering these questions it has helped in making the respondent understand whether not they are being safe when using social media and are aware of what can help them or if more needs to be done.

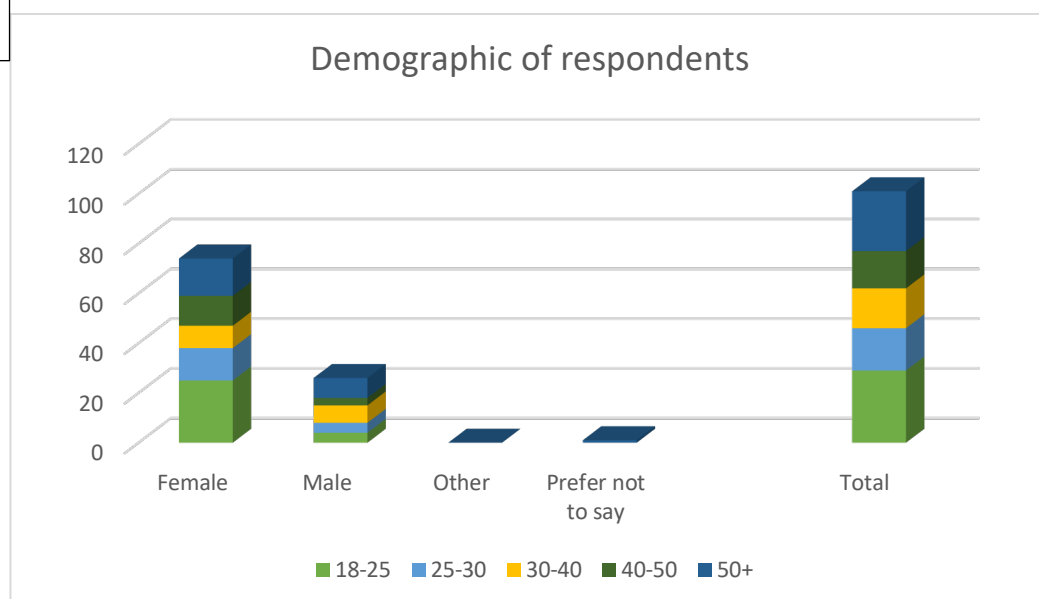
Analysis results and findings

From discussing the perceived risks or the proposed benefits of technology when it comes to examining domestic violence and then discussing how a survey will be the choice method of testing the public's perception when it comes to the safety they should bear in mind when it comes to their online presence, the survey results all complied and analysed – displayed in a variety of charts and graphs now need to be looked into and hopefully develop from this whether or not the original hypothesis of this survey which was aiming to understand whether or not the public when online were doing so with complete safety has been answered at all. To make for an easier understanding and should it be required comparison to the previously included survey each of the questions within the survey have been placed in as a subtitle followed by a brief explanation of what the questioned asked then followed by the analysis of the results based on the responses that were received.

Question 1&2

Question 1 & 2 were introductory questions that covered the demographics of the respondents, by asking this type of question it would allow for an understanding to be developed on the type of audience that was answering the questions. These questions asked what the respondents age group was and what gender they identified as. There were four categories created for the gender section (see graph below) and then there were five categories created for the age groups (again, see graph below).

1.1



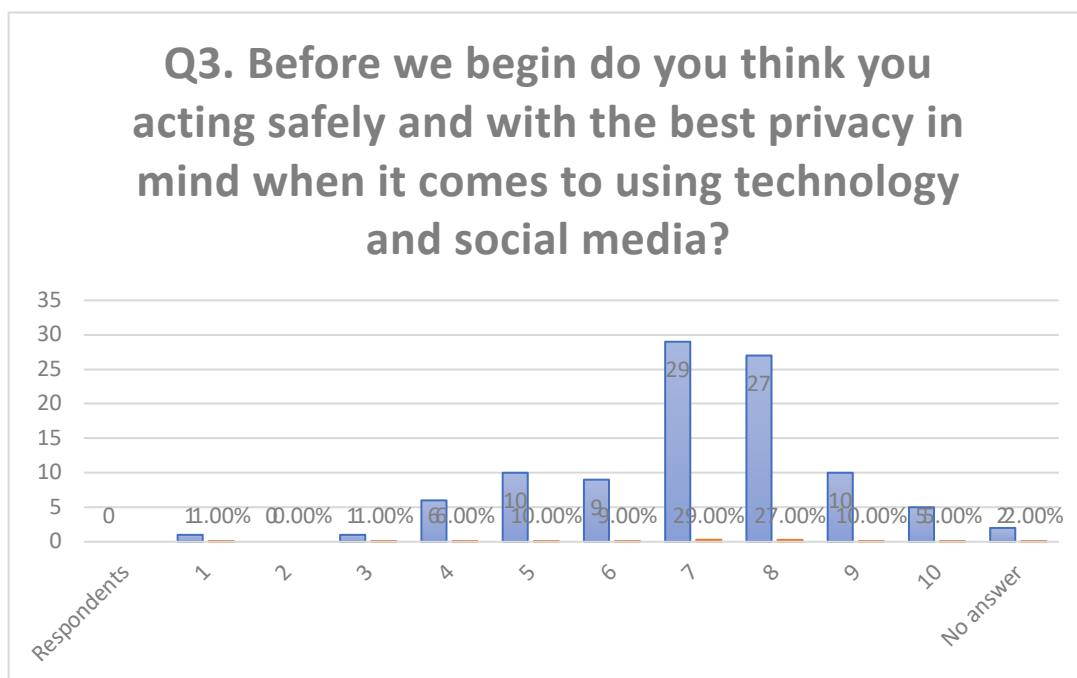
From looking at the above graph, it can be seen that the largest group of respondents for the survey were both female and aged between 18-25 years old – this being the youngest grouping of age on the choice list, whereas the smallest group of respondents were male and coming under the age group for 50+. For the first couple of questions this already proves to be quite interesting given the whole aim of the survey is to try and uncover how safe members of the general public consider themselves to be when it comes to using social media. The reason this proves to be particularly interesting is for the following reason: whilst the survey aimed to test the public's perception and knowledge of safety when it comes to the access and use of social media, it did not suggest that this was for the reason of domestic violence. Therefore, could it be argued that female users and in particular that of younger female users are more cautious or aware of themselves of the internet and social media or not? And if they are, is this directly correlated to the issue of domestic violence and coercive controlling or this to do with completely different reasons? This, of course is something that will be discussed further as the analysis of the results develops.

Question 3

The third question that was posed to those partaking in the survey could perhaps be perceived as a 'test' prior to answering any of the further questions. Question 3 was still an introductory question following on from learning what the demographics of the respondents were, but it was also presented to them (on a scale) of how safe they considered themselves to be when using any form of GPS or internet enabled device before asking them any further questions that could then perhaps impact their judgement and therefore mean that the survey would not have an as accurate results as anticipated. Question 3 was set out in the form of a '*scale*' which would then ask the person taking part to decide how safe they felt they were from numbers 1-10 with 'number 1' which would be '*not safe at all*' to then '*number 10*' which would be that they considered themselves to be '*very safe*' when using internet enabled or GPS devices or accessing social media sites for personal use.

From the graph below we can see that 98% of respondents to the survey answered this question on how safe they felt they were being when using social media or the internet with the majority being towards the higher end of the scale. For example, 29% of those who answered placed their online safety at a 'number 7' on the scale and 27% stating they were a 'number 8'. Interestingly, only 1% considered themselves to be a 'number 1' on the scale and 5% considered themselves to be extremely safe and placed at a 'number 10' on the scale. Whilst this gives an insight into those who were responding to the survey thought about their internet safety and social media security prior to taking part in any further questions. However, there were a few limitations identified in terms of this question. For example, whilst it gives insight into the general perception of those taking part that is all we have access to – we are unable to determine whether those who consider themselves to be the 'most safe' are of a particular gender or age grouping. Should this have been incorporated into the question, it may have helped with further analysis of the hypothesis to this study in terms of understanding domestic violence victims and social media use.

1.2



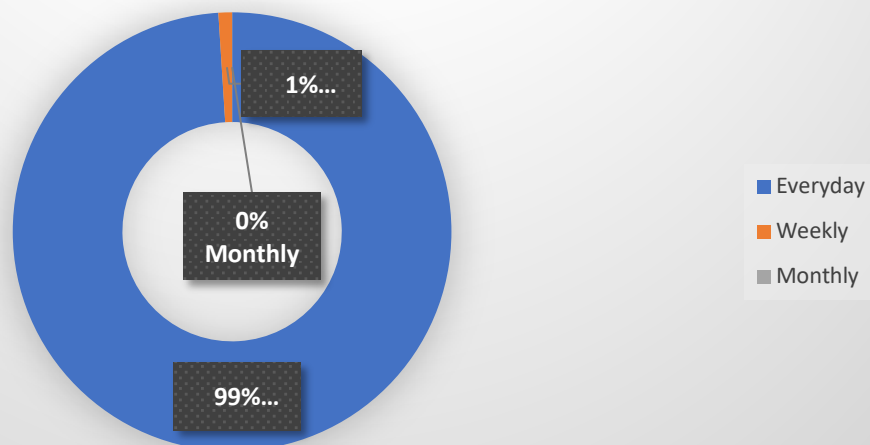
Question 4

However, whilst the previous information may not have told us the exact demographics of those rating themselves, we know for certain based on the first 2 questions that the majority of

participants to this survey are female. Another area of information that was insightful was question 4 which asked how many people were using or had access to an internet or GPS enabled device. 100% of participants answered this question and it gave them 3 options to choose from based on their usage: option 1 – everyday, option 2 – weekly, and option 3 – monthly. Out of that 100%, 99% of respondents said they used an internet or GPS enabled device every day and only 1% stated they used one 'weekly'.

1.3

Q4. How often do you use a smart device such as a smartphone or smartwatch, tablet or any other internet or GPS enabled device?



Question 5 & 6

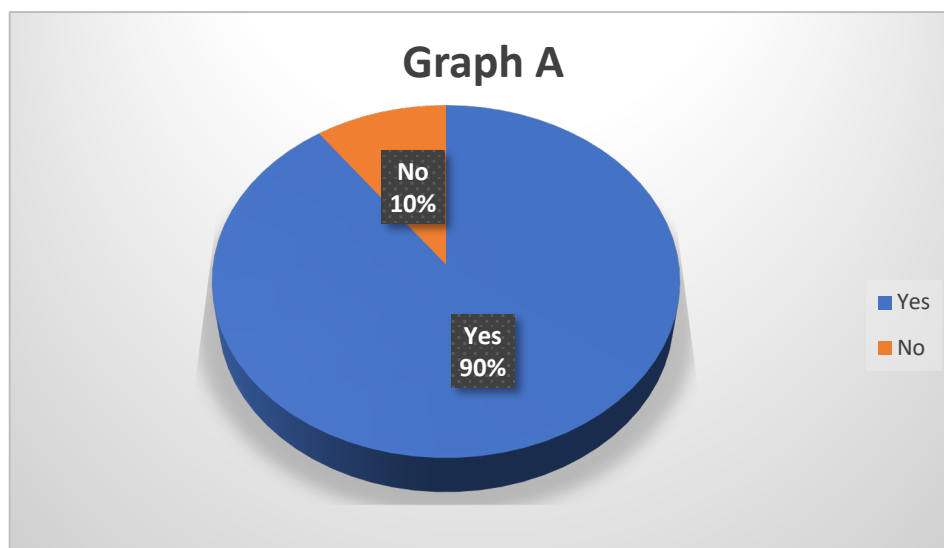
Moving on from understanding what the demographics of the respondents were and querying basic information such as that of their access and use of an internet or GPS enabled device, the understanding of the respondent's awareness when it comes to social media was going to be assessed over the next set of questions. The first area that was going to be assessed was the perception or awareness of security features within certain internet or GPS enabled devices. The reasoning behind this question and the link to domestic violence was because tracking elements or apps to certain devices – although to some can be viewed as a feature that can prove useful

to those who may require it can also prove extremely dangerous to anyone who is at risk of domestic violence abuse from there partner or immediate family member.

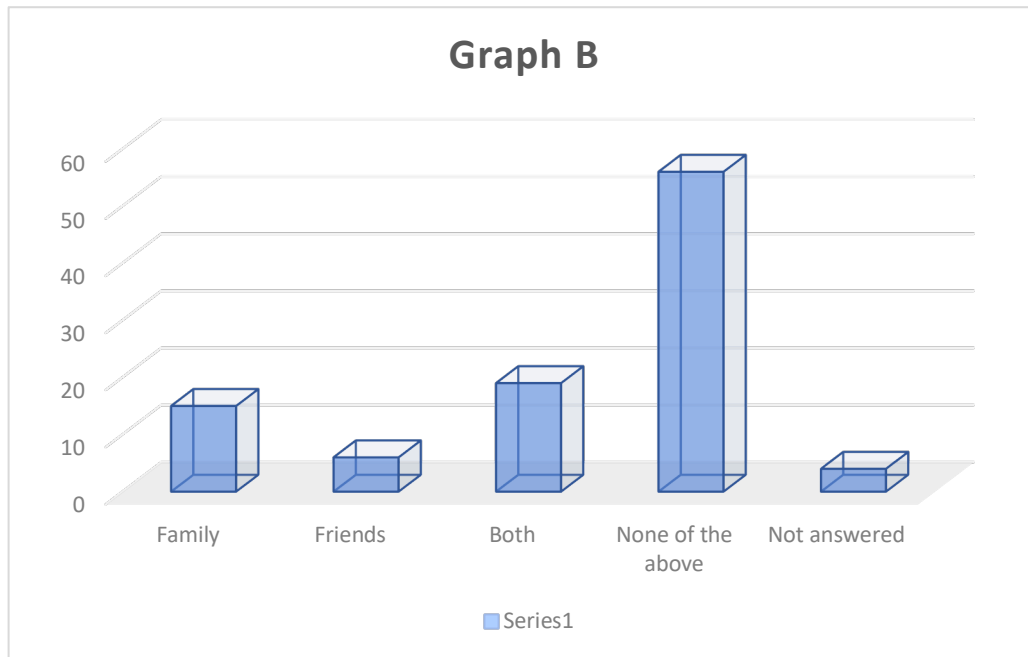
When posing the question to those taking part in the survey, the tracking features were linked to 'well-known' applications or software on any Apple iPhone or Android enabled device i.e. Samsung mobile phones. These 'well-known' applications were 'google locations' or in the case of Apple

products 'Significant locations. From looking at '**graph A**' below it can be seen that this question received 100 responses from those taking part with 90% of those answering that they had heard of these features and only 10% stating they had not. By developing an understanding of who was aware of these features it was then asked whether or not they were used by those taking part in the survey did they use the feature to share their location with any friends or family. From '**graph B**' it shows that 56% out of 100 answered that they did not share with friends or family, with only 15% sharing with family, 6% sharing with friends and 19% sharing with both. 4% of the 100 responses chose not to answer the question.

1.4



1.5



To gather more of an in-depth analysis of why there was a large number of responses to location services being shared or not shared, those taking part in the survey were invited to provide a short sentence or two to why they did so. The results were varied. One person who responded on the basis they shared their location settings stated that they relied on these location tracking features to ensure the safety of their own father who suffered from dementia whereas another response which was on the basis of the location not being shared stated that they kept it off due to 'advertisements' on social media being able to 'target' them. Further to this, there were several responses that stated they shared their location features with it either being friends or family as a security feature in terms of their loved ones knowing their whereabouts should they not arrive at a destination on time. Whilst this question was asking those partaking if they were aware of this feature on a device the answers for those that were aware of it and using it are interesting in terms of what this thesis is discussing. The question in relation to this thesis was asked based on the idea that a domestic violence perpetrator could use tracking features to know where their victim was at all times. However, as suggested by the responses in this question the public is not overly concerned with the tracking being used for this feature but rather the fact that big companies and others are using activity to track and monitor and then advertise based on the customer. Similarly, those that were happy to keep the location tracking features on were stating that it was used to ensure that there were able to make sure loved ones could be located should the need arise. It is worth considering with this

question that had it been worded slightly different and given the person partaking the idea that it could be misused in a controlling manner would the answers have greatly differed to what they are now?

The next question that the survey then moved on to ask was about the security aspect of devices such as the 'saving' of any passwords or usernames or even bank details to their device that could possibly allow friends or family to easily have access to. Again, the same examples of software were put to them on the basis of either an Apple or Android device being used. For this question, 100 people responded and 60% agreed that they did save such information, 34% stated they did not and 6% were not sure. Although, the survey did not allow the person partaking to explain their reasons for saving this data compared to the last question that did allow for those taking part to expand on their answer. Although this has not impacted the analysis that much it can be considering slightly problematic in terms of getting a more in-depth picture of why these features may or may not be used by members of the public.

So far, the results are providing an interesting insight into the way that this selection of the public are using their internet/GPS enabled devices and allows for good interpretation to be made when it comes to comparing this to the hypothesis. However, can it be established whether or not a trend is emerging? The first questions that covered the demographics of those taking part informed us that the majority of those answering were female and in particular of a younger age grouping (18-25). Therefore, can it be assumed based on the data discussed so far that females are in particular that of a younger generation are more conscious and aware of the technology that is available and how and when it can be best used? Or is it impossible to draw this conclusion and assume that those taking part do not have a predisposed awareness of technology and there needs to be more attention and focus brought to the dangers of it when it can be misused by the wrong person. It certainly does make for an interesting debate.

From asking questions relating to the devices themselves and developing data that related to the perceptions on individuals and how they used certain features on devices, the focus on the survey now shifted towards a social media stance, this was to then further understand what those taking part thought when it came to posting online content and how much did they think into it when do such – for example, were they considering who was seeing the photo, who may comment on it or who could even save that photo. To develop this the first question that all

respondents were presented with was a 'tick box' question and with this they were asked to place a 'tick' in each of the boxes for each social media account they owned or used. Out of the 100 people that took part in the survey, 100 people responded to this question and as an overall 97% of responses stated they had/used a Facebook account. 77% stated they had an Instagram account, 49% stating they had Snapchat, 46% on Twitter, 36% on TikTok, 35% on LinkedIn and 8% stating they used 'other' forms of social media (see graph 1.6 on page 38 for reference). Although, it those who marked 'other' were not challenged on what this could be. These statistics in themselves are insightful with regards to opportunities that could be presented to a domestic violence perpetrator. Facebook alone has many users worldwide but how closely monitored are fake accounts that are created or accounts that can be hacked? According to Nicas from the New York Times it would seem that Facebook themselves do not even hold the answer to that but are aware of what constitutes as a fake account, which is: an account set up to scam or mislead someone, a business set up as a profile rather than a business page or someone impersonating others (2019).

Carrying on with the types of accounts that were held it was then asked if those taking part knew who all of their '*followers*' or '*friends*' were on these sites. In total, there were 100 responses with the following being uncovered; 48% stated that they knew all of their '*followers*' or '*friends*' with 35% then stating that they '*mostly knew*' and a what could be perceived as reassuringly positive in comparison to the rest of the statistics – 14% said that they did not know all of them (see graph 1.7). To expand on this further it was then put forward to the participant how often did they ensure their privacy and security settings were up to date? Again, 100 people answered the question with the following results being established: 29% stated that the '*regularly*' checked their settings, 40% stated that they '*sometimes*' checked them, 25% saying '*rarely*' and finally, 6% stating that they never did (see graph 1.8). This data was perhaps the most insightful in relation the social media section of the survey. The reason being this information when applied to that of the hypothesis of this thesis shows that general members of the public are not perhaps taking their security settings seriously enough. Does this mean they are putting themselves at an increased risk by not maintaining up to date security and does this fault lie with them or does more need to be done by the social media giants that would push users to consider their online safety and presence?

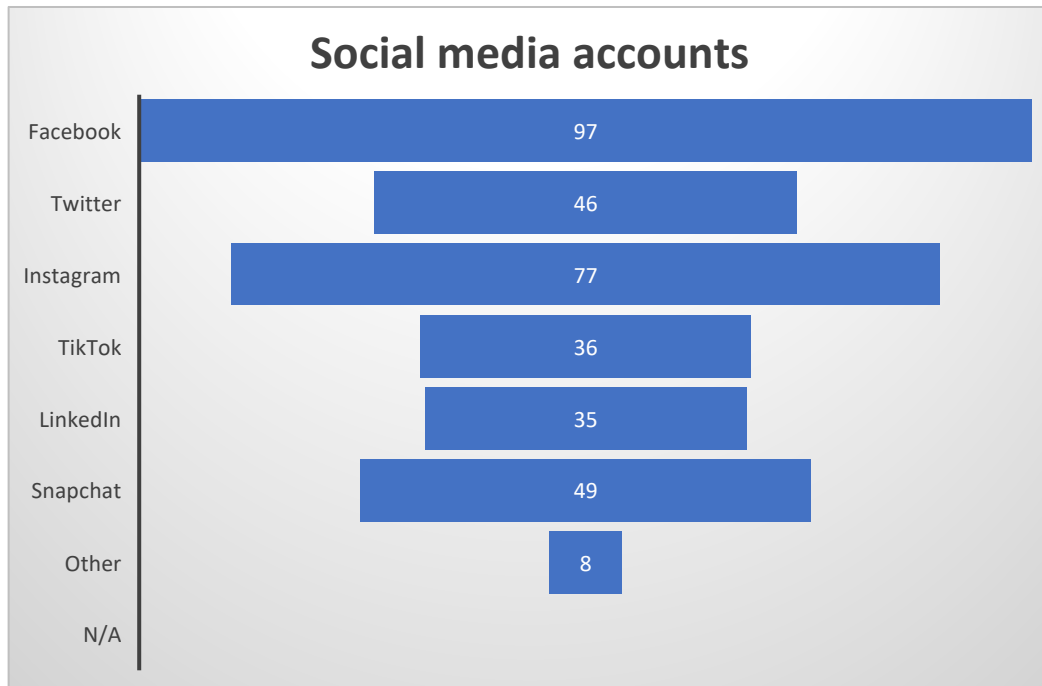
The final section within the social media section of the survey then put forward to the participant that would they be happy with what content was being shared on their accounts,

that could well be shared with someone they do not know based on the previous data. This content then either being: photos, videos or status updates that could display where that person is and inform a person viewing that post where they may be. Therefore, the question that was asked was would the user of that account be happy and comfortable with a complete stranger having access to them or seeing them. Again, 100 people answered the question with the majority (48%) stating they were happy for this. This was followed by 35% saying that most of what they uploaded they would be happy a stranger seeing but 17% stated that what they posted they would not be happy with it being seen by a stranger (see graph 1.9). With the highest answer stating that they would be happy having their content viewed by a stranger it poses the question that is there a consistent theme with the majority of respondents and that the initial scale question that was answered at the start of the survey accurate?

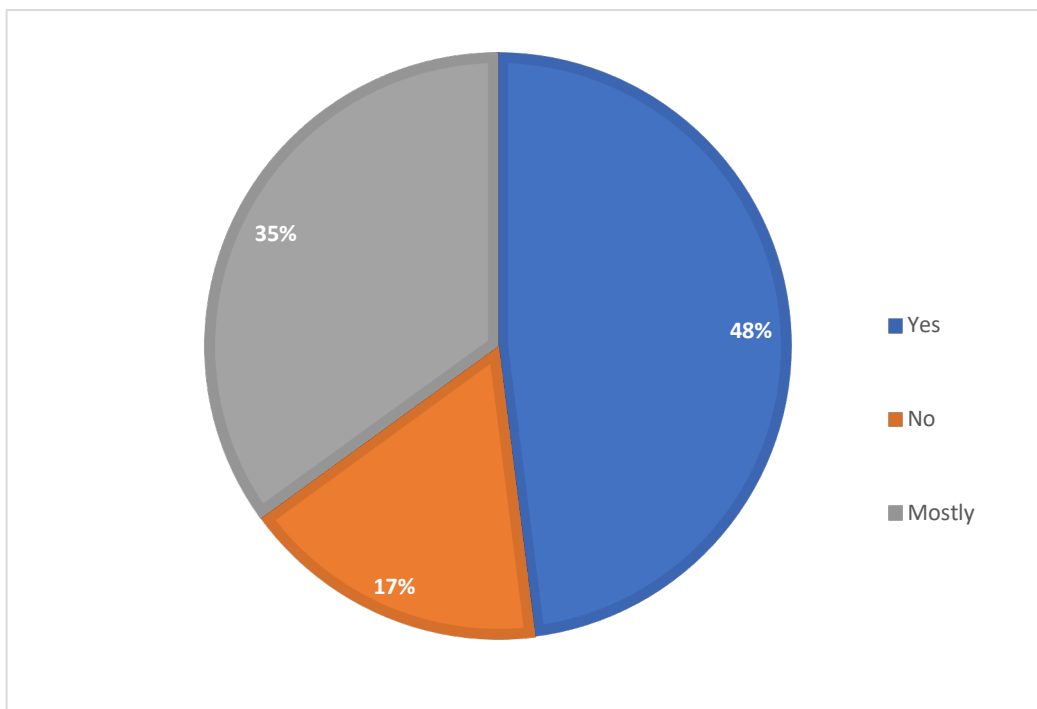
Further evidence that keeps this theory up is the fact that the question that followed to this asking about whether or not respondents often checked their privacy settings to see what strangers could in fact gain access too, out the 100, 29% said they regularly check their settings with 40% stating they did this only sometimes.

On the next page, the above data discussed has been displayed into tables. In the following order graph 1.6 shows the type of accounts that those participating have access too, graph 1.7 then shows the data displayed from asking if it was known who all their followers or friends were, graph 1.8 relates to the privacy aspect and finally graph 1.9 shows the data from answering the question relating to content being posted that a stranger would be comfortable viewing.

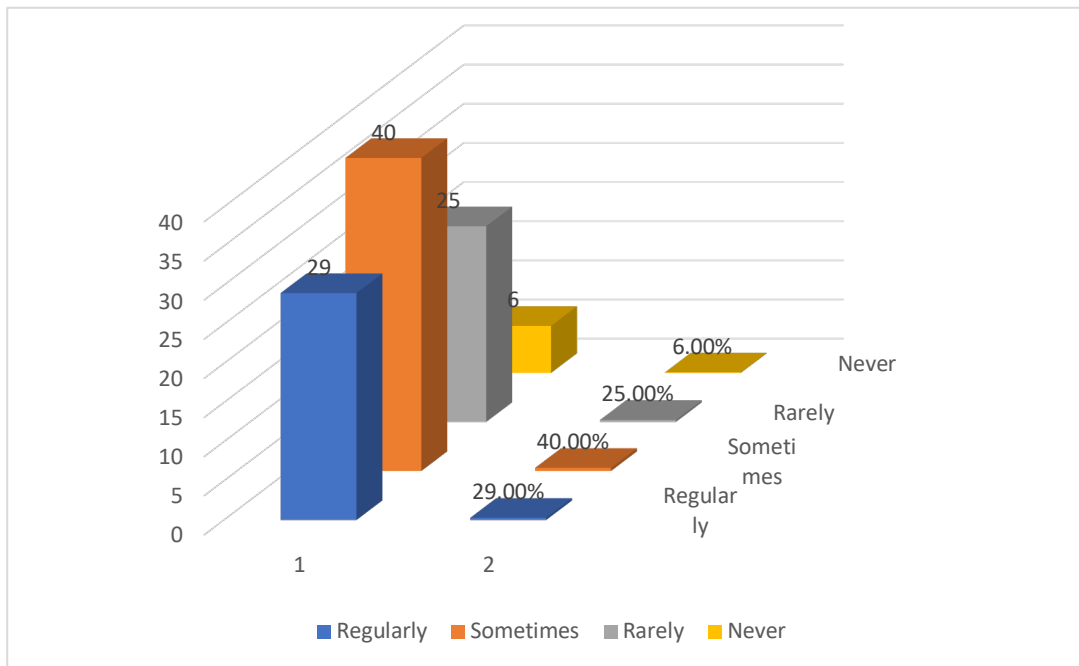
1.6



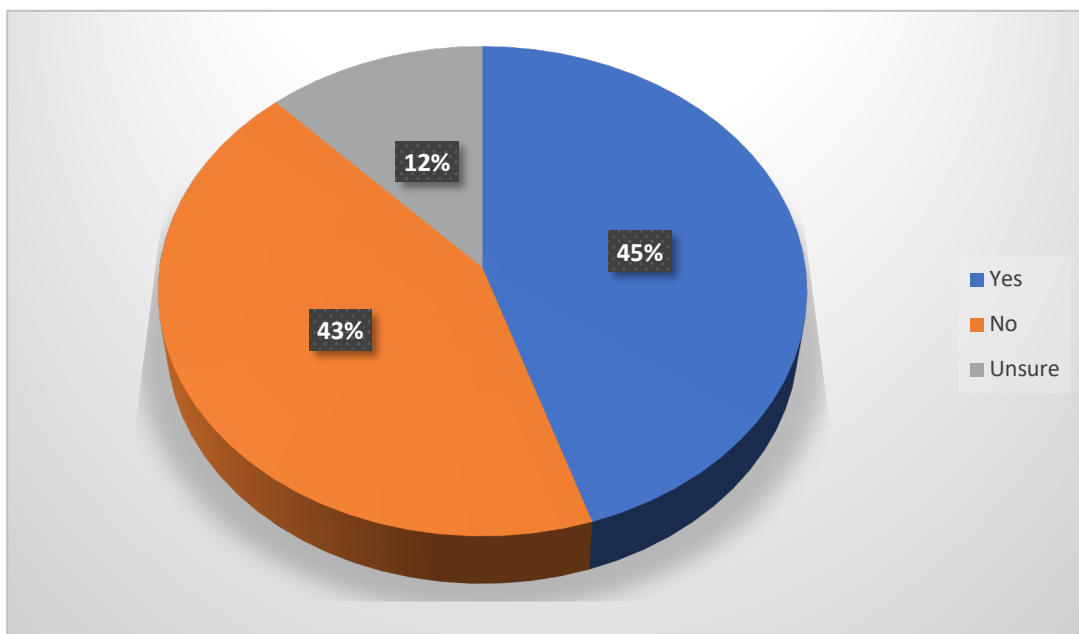
1.7



1.8



1.9



Conclusions and recommendations

The original hypothesis for this thesis was aiming to understand how safe members of the public considered themselves to be when it came to the use of the internet and social media, and also developing an understanding of what their knowledge was on safeguarding themselves. The reason for the choice in this topic was to form and understand whether or not there was a link to domestic violence and coercive controlling behaviours being more prevalent due to the growth in technology.

In order for the thesis question to be fully explored and understood there were several objectives that needed to be met. These objectives were as follows; to discuss in the introduction chapter what the thesis was going to carry out and why this was wanting to be done. The second one was to then discuss the issue of domestic violence and coercive control and to understand the scale of the issue within contemporary society. Thirdly, to test the hypothesis it was determined that a research piece would need to be conducted – this being in the form of a survey targeted towards the general public. And finally, the fourth objective was to then compile all the answers from the survey and develop data which would form an answer to the original hypothesis. This data would also be compiled and placed into graphs (which can be referred to by looking at the ‘tables’ page within this thesis).

The introduction discussed this hypothesis further and outlined the method of study which was to take place in order to gain insight into this. The chosen method was that of a survey which would be shared amongst the general public, aiming to invite all genders, and ages to partake.

The second objective was the ‘literature review’ which discussed in depth the subject of domestic violence and coercive control and within that drew a focus upon ‘tech abuse’ which explained the ways in which a domestic violence perpetrator could use technology to their advantage. However, on the flipside it was also discussed how technology can now be used as a benefit to those who are at risk or currently experiencing domestic violence with apps such as Bright Sky, or Hollie Guard. The literature review also looked into two case studies of domestic violence victims that aimed to highlight or understand the dangers of technology and what can happen if not enough is done in time to help.

The third objective was the ‘methodology’. This objective was to cover and reason for the choice for a survey to capture and analyse data. The methodology discussed that by carrying out a

survey that allowed for a variety of members of the public to participate and not targeted specifically to one group. It also allowed for ease of access and time constraints were reduced hugely by letting those who wished to take part do so at any free time they had between two fixed dates (quite a length apart). The methodology section also discussed why the survey was the best placed method for data collection compared to other options. The main reason of course for a survey being chosen was to do with the ongoing COVID-19 pandemic which has meant that society has had to adapt to changes, this then meaning that it was not practical or able to conduct interviews face to face or arrange to attend with organisations or victims specific to the area of study.

The final objective was to then carry out the survey. This was done via the use of google forms and was shared with participants by the distribution of a link.

It now needs to be understood what the thesis ultimately uncovered.

As discussed in the literature review chapter it was evident there were both strong arguments for and against the use of technology with regards to the topic of domestic violence and coercive controlling behaviour. It was initially discussed within this chapter the ways in which a perpetrator can use technology to their advantage, for example to create that 'omnipresent' feeling which allows for control to be exercised even more. It was also researched the ways in which this abuse can take place with certain offences such as 'revenge porn' being discussed. However, it was also looked into what the benefits of technology are for those that are victims. This involved the discussion of various applications purposely designed with safeguarding a victim of abuse – such as that of Hestia's Bright Sky. It was also briefly discussed the methods of an emergency service (Police) that have also been developed to safeguard a victim.

Debating the positives and negatives of technology from the viewpoint of an abuse victim was further highlighted by including case studies to highlight the points made. For example, when discussing the omnipresent feeling technology can create with regards to tracking and monitoring of devices the case of Alice Ruggles was used to highlight just the lengths that a perpetrator of domestic violence will go – with Ms Ruggles it was too late, and she was sadly murdered at the hands of her ex-partner before it could be identified what lengths he had gone to. Another case that was discussed within the literature review was that of Hollie Gazzard who was also a victim of domestic violence and was murdered by her partner whilst she was at work.

This case was an integral one to discuss as part of the thesis due to it being discussed within the thesis that her parents had developed an app as part of her trust that was to use technology in a positive way to help those in need.

Overall, the literature review provided some key factors on reasons why technology can be negative and also positive, determining it to be a 'double edged sword' - there are many positives that come with technology especially with developments it is able to make in shorter time frames, it is also beneficial to continuously look for new methods of protection and safety for those who could become victims – for example, in the report mentioned within the first 2 chapters of this thesis titled 'Tech v Abuse' it was discussed that several charities part of the report were each given a fund that would allow them to do this. Although, whilst positive that new methods of safeguarding are always being developed it should be noted that with more awareness surrounding these applications comes more danger. For example, should perpetrators of domestic violence and coercive controlling behaviour be what is known as 'tech-savvy' then it makes it harder to create a tool that will genuinely protect an individual.

The literature review uncovered detail into the scale of the problem within contemporary society but in order to understand the issue further and to test the hypothesis that had been developed for this thesis, research needed to be conducted. This was where the next chapter – methodology discussed what research was planned.

Within the methodology chapter it was to be discussed the choice in research method and the reason for doing this. The chosen method as previously discussed was to conduct a survey. One of the main reasons that this was the choice in research method was due to the 2020 Coronavirus pandemic (which at the time of writing this conclusion is still currently ongoing). Other reasons that were mentioned for the choice in research method was on the basis that it was going to be the most efficient and effective at gathering data in the time frame that was stated within the chapter. The chapter also discussed what other method may have been potentially used to carry out the research and that was interviews. It was discussed in depth that interviews would have been a good choice for developing a focus upon domestic violence victims and their perceptions on technology and its uses in terms of safeguarding. However, the methodology chapter did discuss that this was not a possible method of choice due to factors such as the pandemic altering the current societal norms and values.

The research element to this thesis was carried out using the platform 'Google surveys' and this was discussed why this was the best suited method for doing so. Comparing what was stated within the methodology chapter with regards to using this platform it is safe to say that this was all relevant and this made for a very successful collection of data.

The survey itself wanted to cover some main aspects that are featured within many technological devices now and that linked in with what had been discussed so far within the introduction and literature review chapters of the thesis. The reason for doing this would be that questions were going to be targeted towards members of the public on the basis of developing an understanding of how safe they act and what knowledge or awareness they have on technology that can be utilised by a domestic violence perpetrator.

The survey itself once completed and sent out was successful in terms of the responses received. By reading the analysis chapter of this thesis it can be seen that 100 members of the public responded all of whom were from varying age groups and genders, this in itself was a positive for the thesis because it gave a good demographic of respondents to work off.

By working through each of the responses that were received and compiling the data into graphs, one of the things that became obvious was that the majority of respondents to the survey were female and aged between 18 and 25 years old. The survey did have a lot of responses that also related to being incredibly aware of tracking features and the choice of whether to use them or not – could this perhaps suggest that there is a trend between young females and them already being cautious or aware of the risks associated or is that just an assumption that can be made based on the fact that women are more likely to suffer abuse from a loved one when compared to a male victim?

Recommendations

To draw this thesis to a close there a few recommendations that could be suggested in order to develop this research further or highlight areas that could have been improved prior to this.

They are as follows:

1. The hypothesis – whilst this aimed to uncover how aware the public was of the dangers that technology could present to someone who is at risk or is suffering from domestic violence it could have perhaps focused on a particular audience i.e., former victims of

domestic violence or younger generations. The results that were delivered were incredibly informative however could further insight be gained by narrowing the target audience.

2. Choice of research method – The use of google surveys was seamless and ensured that data was captured efficiently and in the most effective way possible however, as already discussed and had there not being a pandemic ongoing at the time of research then could a more effective method be put to use – for example, the use of interviews on perhaps females ages 18-25 in order to understand their use of technology and how safe they consider themselves to be? It is an interesting point to bear in mind, although despite this the method of research that was chosen was incredibly successful.

It can be considered that this thesis has been successful in terms of answering the original hypothesis that was posed however it has also been identified where it can be improved. From carrying out a detailed analysis of the risks of domestic violence and technology and posing to the general public a survey that relates to this what could follow on from this? Hopefully, further research can be conducted into the creation of awareness and ensuring that technology is put to use for safeguarding purposes only and not for some of the reasons that have been discussed within this thesis.

To summarise and conclude this thesis it can be argued that technology is most certainly a “double edged sword” (Al Alosi, 2020) it has the means to safeguard but also can create danger. The awareness of the general public when it comes to the potential misuses of technology is not as high as expected although can be concluded that those of a younger audience and more so female are more aware. It, therefore, leaves a door wide open for this research to perhaps be developed upon and looked into further.

Appendix

Copy of the survey:

How safe do you think you are when using technology and social media?

My name is Jenny, and I am an MA student at the University of Wales Trinity Saint David. I am currently in the process of completing my dissertation as part of my course 'Criminal Justice and Policing'. As part of that dissertation, I have to carry out research which aims to develop an understanding of how safe people are when it comes to technology and social media use and have therefore designed this survey. Any responses to this survey will form a significant part of my research and all responses to this are anonymous and nobody will be contacted based on the information they provide.

*If you are taking the time to complete this survey, I would like to take this opportunity to thank you in advance. ***Required***

1. Are you: *

Mark only one oval.

- ☐ Female
☐ Male
☐ Other
☐ Prefer not to say

2. What age group do you come under? *

Mark only one oval.

- ☐
☐
☐
☐
☐

1

8

-

2

5

2	1	2	3	4	5	6	7	8	9	10
Not very safe at all	☐	☐	☐	☐	☐	☐	☐	☐	☐	Very safe and extremely cautious

Technology

This section will ask questions based on technology devices that are internet or GPS enabled

- 5
-
- 3
- 0
- 3
- 0
-
- 4
- 0
- 40 - 50
- 50 +

3. Before we begin, do you think you are acting safely and with the best privacy in mind when it comes to using technology and social media? *

Mark only one oval.

4. How often do you use a smart device such as a smartphone or smart watch, tablet or any other internet or GPS enabled device? *

Mark only one oval.

- ☐ Everyday
- ☐ Weekly
- ☐ Monthly

5. On these devices are you aware of certain GPS or tracking features such as 'significant locations' on Apple devices or 'google locations' on Android? *

Mark only one oval.

- ☐ Yes
- ☐ No

6. If yes, do you share your location with any of the following.

Mark only one oval.

- ☐ Family
- ☐ Friends
- ☐ Both
- ☐ None of the above

7. If yes, please explain your reasons for sharing?

8. If no, is there a reason for keeping your location off?

9. Do you 'share' or 'save' any login details or personal information to your smart device which could allow access to family, partners or friends? For example, on Apple devices the use of 'iCloud' or on Android devices 'Google Backup' *Mark only one oval.*

- ☐ No
- ☐ Yes
- ☐ Unsure

The following section will now cover aspects of social media use

Social Media:

10. Do you use any of the following Social Media Sites? Please tick all that apply. *

Tick all that apply.

- ☐ Facebook
- ☐ Twitter
- ☐ Instagram
- ☐ TikTok
- ☐ LinkedIn
- ☐ Snapchat
- ☐ Other
- ☐ None of the above

11. Do you know all of those who are 'following' you or are 'friends' with you on social media sites such as Facebook, Instagram or Twitter? *

Mark only one oval.

- ☐ No
- ☐ Yes
- ☐ Mostly

12. How often do you check your privacy settings to see what information about yourself is easily accessible to a stranger? *

Mark only one oval.

- ☐ Regularly
- ☐ Sometimes
- ☐ Rarely
- ☐ Never

13. Do you share information or photos that you would for example be comfortable a stranger knowing about? *

Mark only one oval.

- ☐ Yes
- ☐ No
- ☐ Unsure

Safeguarding

The next few questions have been designed to understand the knowledge of the public when it comes to opportunities to safeguard yourself from potential unwanted behaviour?

14. Have you heard of any of the following Apps? Please tick all that apply: *

Tick all that apply.

- ☐ Bright Sky
- ☐ Hollie Guard
- ☐ FollowItApp
- ☐ Find my Friends
- ☐ What 3 Words
- ☐ None of the above

15. Do you think there should be more awareness and development of apps that can help in an emergency scenario? i.e., you need to contact the police but are unable to speak. *

Mark only one oval.

- ☐ Yes
- ☐ No

16. Have you heard of the 'Silent Solution' or 'Dial 55' for contacting Emergency Services? *

Mark only one oval.

- ☐ Yes
☐ No

This is the end of the survey. The next few questions have been added to understand what users who took part in this quiz are taking away from this.

17. By taking part in this survey has it made you want to check up on your security settings on internet and GPS enable devices? *

Mark only one oval.

- ☐ Yes
☐ No
☐ already do

18. By taking part in this survey has it made you more conscious of what you post on social media and made you want t take extra precautions? *

Mark only one oval.

- ☐ No
☐ Yes
☐ already do

19. When answering the safeguarding section has it made you aware of applications that may be of use to yourself or loved ones? *

Mark only one oval.

- ☐ Yes
☐ No
-

20. And finally, do you feel by taking part in this survey your answer to question 3 has now changed? (Q3 ... do you think you are acting safely and with the best privacy in mind when it comes to using technology and social media?) * *Mark only one oval.*

☐	Yes
☐	No

This content is neither created nor endorsed by Google.

Google Forms

Reference list

2019. *Tech v Abuse: research findings*. [ebook] Comic Relief, pp.3-34. Available at:
<https://d1c4e1f2-14ed-423b-8bab-01c0ad397d8f.filesusr.com/ugd/464d6d_b465be597dee4e04b8fac09363e4ef62.pdf> [Accessed 4 March 2021].
- Alicerugglestrust.org. 2021. *Alice Ruggles Trust - Alice's story*. [online] Available at:
<<https://www.alicerugglestrust.org/alices-story>> [Accessed 10 March 2021].
- BBC News. 2014. *Hairdresser Hollie Gazzard murder: Ex-boyfriend jailed for life*. [online] Available at:
<<https://www.bbc.co.uk/news/uk-england-gloucestershire-28327025>> [Accessed 11 March 2021].
- Behi, R. and Nolan, M., 1995. Ethical Issues in Research. *British Journal of Nursing*,.
- BroadbandSearch.net. 2020. *Average Time Spent Daily on Social Media (Latest 2020 Data)*. [online] Available at: <<https://www.broadbandsearch.net/blog/average-daily-time-on-social-media>> [Accessed 7 February 2021].
- Comicroelief.com. 2021. *Mission / Comic Relief*. [online] Available at:
<<https://www.comicroelief.com/about-comic-relief/>> [Accessed 10 March 2021].
- Coyne, S., Rogers, A., Zurcher, J., Stockdale, L. and Booth, M., 2019. Does time spent using social media impact mental health?: An eight year longitudinal study. *Computers in Human Behavior*, 104, p.106160.
- Dolnicar, S., 2013. Asking Good Survey Questions. *Journal of Travel Research*, 52(5), pp.551-574.
- Doughty, S., 2020. *Alice Ruggles: The graduate killed by her stalking ex*. [online] ChronicleLive. Available at: <<https://www.chroniclive.co.uk/news/north-east-news/alice-ruggles-graduate-killed-stalking-17661974>> [Accessed 10 March 2021].
- Douglas, H., Harris, B. and Dragiewicz, M., 2019. Technology-facilitated Domestic and Family Violence: Women's Experiences. *The British Journal of Criminology*, 59(3), pp.551-570.
- Extreme Tactical Dynamics. 2021. *The Future of Technology in Emergency Response and Management*. [online] Available at: <<https://www.extremetacticaldynamics.com/blog/the-future-of-technology-in-emergency-response-and-management/>> [Accessed 10 March 2021].

- Gateshead community safety board, 2018. *Miss Alice Ruggles*. [online] Gateshead, pp.2-101.
Available at: <https://www.gateshead.gov.uk/media/12553/Alice-Ruggles-DHR-Final-overview/pdf/Alice_RUGGLES_DHR_-_Final_Overview_Report.pdf?m=636885844829430000> [Accessed 6 March 2021].
- George L. Kelling, J., 1982. *Broken Windows*. [online] The Atlantic. Available at:
<<https://www.theatlantic.com/magazine/archive/1982/03/broken-windows/304465/>> [Accessed 10 March 2021].
- Google Books. 2021. *Media Now: Understanding Media, Culture, and Technology*. [online] Available at:
<https://books.google.co.uk/books?hl=en&lr=&id=eScLAAAQBAJ&oi=fnd&pg=PR3&dq=technology+and+the+media&ots=kfYKGi9kCe&sig=1xtgpHV7MYQLj7o3Ozkh1vWG2Nk&redir_esc=y#v=onepage&q=technology%20and%20the%20media&f=false> [Accessed 7 February 2021].
- Google Marketing Platform. 2021. *How Google Surveys works*. [online] Available at:
<<https://marketingplatform.google.com/about/resources/how-google-surveys-works/>> [Accessed 10 March 2021].
- Gordon, S., 2020. *How to Identify and Cope with Emotional Abuse*. [online] Verywell Mind. Available at: <<https://www.verywellmind.com/identify-and-cope-with-emotional-abuse-4156673>> [Accessed 7 March 2021].
- GOV.UK. 2021. *National lockdown: Stay at Home*. [online] Available at:
<<https://www.gov.uk/guidance/national-lockdown-stay-at-home#summary-what-you-can-and-cannot-do-during-the-national-lockdown>> [Accessed 10 March 2021].
- Greenberg, A., 2019. *The Simple Way Apple and Google Let Domestic Abusers Stalk Victims*. [online] Wired. Available at: <<https://www.wired.com/story/common-apps-domestic-abusers-stalk-victims/>> [Accessed 10 March 2021].
- Hauk, C., 2021. *Is Someone Spying on Your Cell Phone? How to Tell & Stop Them*. [online] Pixel Privacy. Available at: <<https://pixelprivacy.com/resources/spying-on-your-cell-phone/>> [Accessed 10 March 2021].
- Hestia. 2021. *Bright Sky*. [online] Available at: <<https://www.hestia.org/brightsky>> [Accessed 10 March 2021].

- Hollie Gazzard Trust. 2021. *Hollie Gazzard Trust - Hope, Passion And A Life Fulfilled - Hollie Gazzard Trust*. [online] Available at: <<https://holliegazzard.org>> [Accessed 10 March 2021].
- Hollieguard.com. 2021. *Hollie Guard Personal Safety APP*. [online] Available at: <<https://hollieguard.com>> [Accessed 10 March 2021].
- ieeexplore.ieee.org. 2021. *GPS: location-tracking technology*. [online] Available at: <<https://ieeexplore.ieee.org/abstract/document/993780>> [Accessed 7 February 2021].
- ITV News. 2021. *Tech Abuse: Stopping the Stalkers – Tonight | ITV News*. [online] Available at: <<https://www.itv.com/news/2020-01-09/tech-abuse-stopping-the-stalkers-tonight>> [Accessed 7 February 2021].
- Keats Citron, D. and Anne Franks, M., 2014. Criminalizing Revenge Porn. [online] p.345. Available at: <<https://heinonline.org/HOL/LandingPage?handle=hein.journals/wflr49&div=15&id=&page=>>> [Accessed 10 March 2021].
- Lincs.police.uk. 2021. *What happens when you call the police?*. [online] Available at: <<https://www.lincs.police.uk/contact/what-happens-when-you-call-the-police/>> [Accessed 10 March 2021].
- Martonik, A., 2020. *Apple iPhone 12 Pro Max review: The camera you want, in a size you can't handle*. [online] Digitaltrends.com. Available at: <<https://www.digitaltrends.com/cell-phone-reviews/apple-iphone-12-pro-max-review/>> [Accessed 10 March 2021].
- Meloy, J., 1998. The Psychology of Stalking. *The Psychology of Stalking*, pp.1-23.
- n.d. *What to do if you need urgent police help through the 999 service, but can't speak*. [ebook] Independent office for police conduct. Available at: <https://www.policeconduct.gov.uk/sites/default/files/Documents/research-learning/Silent_solution_guide.pdf> [Accessed 1 March 2021].
- Nationaldahelpline.org.uk. 2021. *What is abuse*. [online] Available at: <<https://www.nationaldahelpline.org.uk/What-is-abuse>> [Accessed 7 February 2021].
- Nica, J., 2019. *Does Facebook Really Know How Many Fake Accounts It Has? (Published 2019)*. [online] Nytimes.com. Available at: <<https://www.nytimes.com/2019/01/30/technology/facebook-fake-accounts.html>> [Accessed 11 March 2021].

- Paladinservice.co.uk. 2021. [online] Available at: <<https://paladinservice.co.uk/wp-content/uploads/2014/11/Digital-and-Cyber-Stalking-Toolkit-2013.pdf>> [Accessed 7 February 2021].
- Reason Digital. 2021. *Domestic abuse – Is technology part of the problem or solution? | Reason Digital*. [online] Available at: <<https://reasondigital.com/insights/domestic-abuse-is-technology-part-of-the-problem-or-solution/>> [Accessed 7 February 2021].
- Research-repository.griffith.edu.au. 2021. [online] Available at: <<https://research-repository.griffith.edu.au/bitstream/handle/10072/388624/Dragiewicz248586-Accepted.pdf;jsessionid=8E6A9F937DA83D63C2246C41F5918ABB?sequence=2>> [Accessed 7 February 2021].
- Safelives.org.uk. 2021. [online] Available at: <<https://safelives.org.uk/sites/default/files/resources/Tech%20vs%20abuse%20report.pdf>> [Accessed 7 February 2021].
- Scholar.google.co.uk. 2021. *About Google Scholar*. [online] Available at: <<https://scholar.google.co.uk/intl/en/scholar/about.html>> [Accessed 10 March 2021].
- Taylor & Francis. 2021. *Technology as a Weapon in Domestic Violence: Responding to Digital Coercive Control*. [online] Available at: <<https://www.tandfonline.com/doi/full/10.1080/0312407X.2019.1607510>> [Accessed 7 February 2021].
- Taylor & Francis. 2021. *Technology facilitated coercive control: domestic violence and the competing roles of digital media platforms*. [online] Available at: <<https://www.tandfonline.com/doi/full/10.1080/14680777.2018.1447341?src=recsys>> [Accessed 7 February 2021].
- Taylor & Francis. 2021. *Technology facilitated coercive control: domestic violence and the competing roles of digital media platforms*. [online] Available at: <<https://www.tandfonline.com/doi/full/10.1080/14680777.2018.1447341?scroll=top&needAccess=true>> [Accessed 7 February 2021].
- The Independent. 2021. *How big data can now be used to predict where crime will happen*. [online] Available at: <<https://www.independent.co.uk/news/uk/home-news/police-big-data-technology-predict-crime-hotspot-mapping-rusi-report-research-minority-report-offenders-risk-a7963706.html>> [Accessed 7 February 2021].

The Independent. 2021. *How digital technology could be making life worse for young people*. [online] Available at: <<https://www.independent.co.uk/student/istudents/rapid-digital-technology-advancement-significantly-impacting-young-people-socially-and-economically-a7014656.html>> [Accessed 7 February 2021].

UWTSD, W., 2021. *Press Releases 2018 | University of Wales Trinity Saint David*. [online] Uwtsd.ac.uk. Available at: <<https://www.uwtsd.ac.uk/news/press-releases/press-2018/strategic-alliance-with-jesus-college-oxford-in-the-field-of-celtic-studies.html>> [Accessed 10 March 2021].

Van Rensburg, G., 2017. Don't rely on technology to replace human relationships.

What 3 Words. 2021. *What3Words*. [online] Available at: <<https://what3words.com>> [Accessed 5 March 2021].

Wolpin, S., 2007. *Apple iPhone (8GB) Review*. [online] Digitaltrends.com. Available at: <<https://www.digitaltrends.com/cell-phone-reviews/apple-iphone-8gb-review/>> [Accessed 10 March 2021].

Woodlock, 2017. *The Abuse of Technology in Domestic Violence and Stalking - Delanie Woodlock, 2017*. [online] SAGE Journals. Available at: <<https://journals.sagepub.com/doi/abs/10.1177/1077801216646277>> [Accessed 7 February 2021].

