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WHO'S FOLLOWING YOU? CYBERVIOLENCE ON SOCIAL MEDIA

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A thesis submitted to the University of Huddersfield in partial fulfilment of the requirements for the degree of Doctor of Philosophy

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Abstract

Social media use has become an integral part of daily life. Within these increasingly influential online communities, a proportion of users are subject to negative online contact in a phenomenon labelled cyberviolence. Cyberviolence is defined as harm delivered by electronic means to a person or people who perceive this contact as negative. A review of existing literature revealed that, despite reliance on distinct offline definitions, all behaviours explored could be classified according to three key themes: sexual, threatening and humiliating cyberviolence. To assess the prevalence of these forms of cyberviolence across social media, 370 participants completed an online survey that featured items relating to victimisation and perpetration, as well as a number of well-established personality measures. These measures explored key traits and models of personality including the Big Five model to assess the potential role of an individual's personality in their engagement in cyberviolence. The results of this thesis suggest that differences exist between those involved in cyberviolence and those who do not engage in cyberviolence on certain key personality traits including psychopathy and narcissism. Models of cybervictimisation, perpetration and a hybrid of cybervictimisation/perpetration revealed that these traits explained approximately ten percent of the variance in cyberviolence indicating that other factors, besides individual personalities, may have more influence over engagement in and/or experience of these behaviours. Overall findings suggest that there is little to demarcate those involved in cyberviolence, as victims or perpetrators, leading to the conclusion that this is not a niche area of deviance, but may be a mainstream side effect of social media use. The implications of these findings are discussed.

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Introduction

Daily interaction with the Internet has become reality for many of us, with the number of people utilising the Internet steadily increasing since its inception. More recently, its potential for facilitation of social interaction has been harnessed and propagated across the globe. The advent of 'social media' platforms such as Facebook, Instagram and Twitter have revolutionised human contact and use of such platforms has increased exponentially worldwide, with Facebook reporting two billion users per month (Kemp, 2017). This increase in online activity has led to many individuals developing a significant online presence, giving them the potential to connect with others worldwide. Within this rapidly developing global network, many interactions are positive and can enhance the lives and relationships of users, from use of social media to reconnect with family and friends to the use of forums and social networking sites to develop supportive online communities (Sengupta & Chaudhuri, 2011; Ybarra, Espelage & Mitchell, 2007).

However, social media has created space for new forms of aggression and criminality, from use of social media to promote terrorist groups and radicalise members (Holt Bossler & May, 2012) to widespread concerns about contact on social networking sites being subverted into negative encounters (Bossler, Holt & May, 2012). These fears echo those felt in offline spaces around 'stranger danger' (Guo, 2008) and bullying between peers (Twyman, Saylor, Taylor & Comeaux, 2010). Despite growing public discussion about the dangers of social media, including the creation of specialist websites designed to safeguard users (for example www.getsafeonline.org), research into negative online encounters is relatively sparse. Existing research also faces contention around the relevance of differentiating 'virtual criminality' from 'traditional' offending, with some theorists suggesting negative interpersonal behaviour online is merely an extension of in-person violence and others

arguing the current theories of in-person violence may not be applicable to the rapidly evolving online landscape (Petersen & Densley, 2017).

Alongside confusion surrounding the definition of such behaviours, there has been a reliance on sampling from child and adolescent populations, leading to a lack of diversity in the conceptualisation of this phenomenon beyond its occurrence in these populations. To the author's knowledge, this thesis represents the first attempt to explore cyberviolence as a phenomenon using a diverse sample of social media users in contrast to the range of other studies that have targeted particular behaviours within adult samples (e.g. sexting as seen in the work of Crimmins & Seigfried-Spellar, 2017). This research also sought to incorporate not only different age groups, but also different cultural populations through the use of an online survey that allowed access to the experience of users from across the world.

This research is the first to conceptualise the diverse definitions used in existing research under one definition, as demonstrated by the literature review in Chapter 1, the behaviours categorised under these definitions share many commonalities that can be classified according to three key themes: sexual, threatening and humiliating contact. This classification contributes to existing knowledge by allowing for a more inclusive approach to social media users' experiences. This approach will allow for future research to draw from wider samples without limiting knowledge according to offline definitions. This thesis also contributes to the growing body of research (Chapter 2), that explores the potential ramifications of social media engagement and conceptualises social networks as spaces in which users can and do behave in negative ways, ranging from intrusive to abusive. These findings have implications, not only for those who manage social media platforms, but also for public policy and legislation that has, to date, struggled to develop in tandem with ever-changing online spaces. The results of this thesis (Chapter 5) demonstrate that cyberviolence is an issue

for a number of social media users within the sample. These results contribute to the findings of existing research and also anecdotal discussions in the media, highlighting that more work needs to be done to safeguard users and address cyberviolence. However, the findings of this thesis also emphasise that there remains much to learn about cyberviolence, whilst the findings of this research can be discussed in terms of supporting existing research (Chapter 6), it is clear that personality alone is not enough to explain the reasons for engaging in cyberviolence, nor are the risk factors for being targeted clear. This leads to the assumption that there are other factors at play that require further theoretical and empirical exploration. Thus, this thesis, whilst contributing to existing knowledge through targeting a diverse sample of social media users and advancing the theoretical conceptualisation of cyberviolence, should be seen as an initial exploration that has laid the foundation for further analysis into a complex, diverse and ever-changing phenomenon.

1. Defining Cyberviolence

Within the current fragmented field of discussion around negative online behaviour, questions arise about the practicality and utility of defining these encounters and the ability of existing models and theories to adequately explore this new frontier. However, attempts have been made to distinguish online aggression from offline; although, those who have sought to provide a definition (Mitchell, Ybarra, Jones & Espelage, 2016; Al Mazari, 2013; Jones, Mitchell & Finkelhor, 2013) have remained reliant on offline definitions translated into online contexts, which has led to confusion (Sabella, Patchin & Hinduja, 2013; Philips & Morrissey, 2004). A further issue is that current research exists in silos, focusing on labelling a set of behaviours according to these offline definitions, rather than exploring the wider context of the behaviour that has been engaged in. This had led to a divided field of knowledge filled with competing definitions and approaches that encompass the same phenomenon—cyberviolence.

One of the most popular offline definitions used within cyberbullying research comes from Olweus (1993) that defines bullying as "an aggressive, intentional act or behaviour that is carried out by a group or an individual repeatedly and over time against a victim who cannot easily defend him or herself" (p. 9). In an online context, this definition is problematic because the requisite factors are difficult to establish with any degree of certainty. Whilst it may be possible for a single individual to target another repeatedly and engage in this behaviour over time, this is not the only form cyberbullying can take. The anonymity available online can also makes it difficult to ascertain if the same perpetrator is targeting the victim. The ease with which information can be shared also leads to scenarios in which the victim may not be targeted by the same individual but continues to be bullied by others.

Whilst this may appear to be accounted for by Olweus' (1993) specification of group

behaviour, it may not be that the individuals targeting a victim are aware of each other or identify as a group.

Similar issues arise when considering the application of offline definitions of harassment to cyber contexts. Offline harassment is defined in the United Kingdom under section 2 of the Protection from Harassment Act 1997 as an act that causes 'alarm or distress'. It can include more than one perpetrator targeting an individual or cases in which multiple victims are targeted by a single perpetrator. The issue with this definition arises from its ambiguity, which requires proof of alarm or distress and also being able to identify the perpetrator. As with cyberbullying, it may be difficult for the victim to ascertain who the perpetrator is due to the ability to create anonymous or fake profiles. Victims may also be targeted by multiple individuals. Whilst this is quantifiable under the Protection from Harassment Act 1997, it relies on the victim being able to gather enough information about the perpetrator(s) which is much more difficult in online spaces.

The field becomes murkier still when exploring cyberstalking. Theorists, including Sheridan and Grant (2007), have suggested that it is not necessary to formulate a definition of cyberstalking as they claim it "to be adjunct to or indistinguishable from off-line stalking, both in terms of its effects on victims and third parties" (pp. 636) and posit that definition is not necessary as long as researchers make clear their "definitional thresholds" and clearly articulate their conceptualisation of stalking. Whilst this lack of rigidity allows for a more inclusive approach within the field of cyberstalking, it does create difficulty when seeking to analyse the field as a whole. There is also the ambiguity associated with offline stalking legislation, particularly in the United Kingdom. The Crown Prosecution Service defines stalking under the Protection from Harassment Act 1997 however there is no clear legal definition of stalking and instead guidelines refer to acts or omissions which can be

associated with the act of stalking, for example watching or spying on an individual. The Act also refers to the effect on the victim which may include curtailing freedom or causing alarm or distress. This ambiguity becomes greater in online contexts. By the very nature of social media, we are all being 'watched' by friends, colleagues and strangers who may choose to access our accounts. Within this realm of watching, it is easy to see how the line may blur between innocent enjoyment of another's social media account, to acts which may have a more sinister motive. The issue arises with how this would be defined according to stalking legislation, given the ease with which malevolent behaviours such as 'lurking' on someone's profile or sharing posts with negative intentions, can be construed as 'normal' behaviour on social media platforms.

The difficulty in mapping offline definitions onto online contexts means that cyberviolence has yet to be clearly defined (Peterson & Densley, 2017), although some scholars, including Grigg (2010) have provided online-specific definitions. Grigg's (2010) definition of cyberaggression refers to "intentional harm delivered by the use of electronic means to a person or a group of people irrespective of their age, who perceive(s) such acts as offensive, derogatory, harmful or unwanted" (p. 152). Whilst attempts have been made to provide a conceptual framework, one issue with existing definitions, such as Grigg's (2010) is the rigidity of inclusion/exclusion criteria. In Grigg's (2010) case, the issue relates to intentional harm, which is difficult to establish online. One positive element in this definition is the focus on the victim's perception of the behaviour; if the victim perceives it to be negative or harmful then it is understood as such. This allows for the exploration of victim experiences without a corresponding perpetrator narrative as perpetrator narratives can be difficult to ascertain, given the often anonymous nature of online interaction.

To conceptualise cyberviolence it is necessary to review the wider field of research in which it resides and to review existing research relating to the three main forms of cyberviolence prevalent in the field: cyberstalking, cyberharassment and cyberbullying. To maintain clarity, a focus on research that examines 'pure' online offending is necessary, rather than studies that compare online and offline behaviours. Although the field of cyberviolence is relatively new and empirical research into the phenomenon is sparse, exploration of purely online offending is further limited, thus emphasising the need for a review of research that examines cyberviolence as a complete construct, rather than an extension of offline behaviour. The lack of online-specific research demonstrates the need for research to shift focus from arbitrary labels towards a more inclusive definition and to begin to consider cyberviolence as a separate, but related, form of interpersonal violence.

Defining Cyberviolence: Issues and Overlaps

As has been noted, the field of cyberviolence research is currently made complex by a lack of singular definition. However, at the base level cyberviolence must include the actions of an individual or group (Al Mutawa, Bryce, Franqueira & Marrington, 2016) utilising the Internet to engage in negative contact with victims. Beyond this, existing literature highlights a number of overlaps and issues with current conceptualisations.

Similarities in Definition

A review of existing empirical study reveals a wealth of information that includes examples of the behaviours engaged in, classified according to the definition chosen by researchers.

Overlaps become visible in the behaviours classified as cyberbullying, cyberstalking and cyberharassment. These overlaps reveal a central triad of behaviours classifiable according to three overarching themes: sexual contact, threatening contact and humiliating contact. These

behaviours can be split into contacting (e.g. sending the victim direct messages or contacting publicly on social media), sharing (e.g. sharing humiliating material about the victim or sending distressing images to the victim) and inciting (e.g. encouraging others to engage in cyberviolence).

Sex in Cyberspace

The use of the Internet for sexual purposes has expanded significantly (Döring, Daneback, Shaughnessy, Grov & Byers, 2017) and the Internet has become a useful tool for those looking for love, intimacy or 'no strings' sexual encounters. Applications such as Tinder® are revolutionising the way we relate to potential partners and providing an outlet for an alternative dating strategy. Alongside new opportunities for dating connections, which result in offline meetings, the Internet also affords an almost infinite number of freely available sexual scenarios for viewer enjoyment in the form of pornography or online-only cybersex (Wéry & Billieux, 2017). Defined under the umbrella of cybersex, online sexual activities (OSA), which refers to Internet-based materials and activities of a sexual nature, have been the subject of scholarly focus, although this attention has often been limited to one or two aspects of OSA (Döring et al., 2017). As with offline sexual activity, OSA can be classified according to six key areas. These areas are (i) sexual information including discussions on safe sex and sexual pleasure, (ii) sexual entertainment, which refers to dissemination and consumption of pornography or erotica, (iii) sexual contact, including searching for and participating in online text- or visual-based encounters, as well as facilitating offline encounters, (iv) sexual minority communities, which relates to specialised sexual behaviours including kinks or fetishes, (v) sexual products, which refers to the purchasing and distribution of products such as sex toys and (vi) sex work, which relates to the selling of sexual services (Döring et al., 2017).

Early research reported lower levels of OSA, however recent studies have demonstrated a noticeable increase in the prevalence of specific OSA, particularly pornography, with Shaughnessy, Byers, Clowater and Kalinowski (2014) suggesting that over seventy percent of their participants had used the Internet for 'sexual entertainment'. Conversely, other behaviours such as cybersex are thought to be less common (Shaughnessy, Byers & Walsh, 2011), although it must be noted that existing research was conducted before the widespread accessibility and popularity of dating applications and so it may be that there has been an increase in prevalence of activities defined as 'cybersex'. Given the inherent cultural differences in studies which have explored OSA in one specific cultural setting, such as Canada (Shaughnessy et al., 2011) or China (Zheng & Zheng, 2014), the findings from Döring et al. (2017) are particularly interesting. Conducted across four countries, this study of student's engagement with a broad spectrum of OSA demonstrated that the students sampled demonstrated relatively infrequent interaction with the OSA explored, although over seventy percent had accessed sexual entertainment and over thirty percent had engaged in cybersex. Within this sample, men were more frequent users of sexually stimulating material, a finding which refutes the earlier view of Shaughnessey et al. (2014) who reported no significant gender differences in their sample when exploring OSA with UK-based university students. The results of this research highlight the apparently ubiquitous nature of sex online, suggesting that as technology has increased so have users' appetites for seeking out sexual gratification within online spaces.

Whilst many individuals engage in unproblematic cybersex, which can be defined as consensual and/or pleasurable online sexual activity, there is the potential for users online sexual behaviour to become problematic. This has received much less scholarly focus, in

spite of considerable public discussion, which has extended to the online curation of such behaviours on social media accounts such as Tinder Nightmares, an Instagram profile that accepts submissions of screenshots from Tinder users who have had negative experiences whilst using the application. This may be attributed to difficulties in establishing what constitutes problematic OSA, defined by Cooper, Delmonico, Griffin-Shelley & Mathy (2004) as frequent use which interferes with the individual's life in terms of relationships, employment and personal life. This definition is open to challenge, as results have suggested that less than ten percent of samples report such ill effects, as noted by Shaughnessy et al. (2014), and yet the anecdotal online evidence suggests there are growing concerns around the issue of negative OSA. Whilst the impact on users who engage in negative OSA, defined as behaviour that has a negative impact on the self (Cooper et al., 2004) or others (see Jane 2017, 2016, 2015, 2014) is an important area of research, it is also complex. Within the scope of this thesis, this behaviour is limited to that which negatively impacts on others, in the form of cyberviolence, rather than behaviour that has a negative impact on the individual in terms of offline consequences for relationships. Whilst some researchers have examined unsolicited sexual contact within the silos previously discussed, this field requires expansion and cohesion to unify existing knowledge. Within the context of cyberharassment, actions include making sexual advances (Reyns, Henson & Fisher, 2016) and sending personal messages (Dreßing, Bailer, Anders, Wagner & Gallas 2014). Cyberbullying theorists have suggested behaviours with a sexual or intimate overtone include attempts to coerce the victim to perform sexual acts or expose themselves online and can include attempts to blackmail the victim into doing so by threatening to share secrets or spread false information (Tarapdar & Kellett, 2013; Mishna, Saini & Solomon, 2009). Offenders may also send sexual photos (Mishna, Khoury-Kassabri, Gadalla & Daciuk, 2012) or other sexual material (Al Mazari, 2013), or share private pictures without consent (Mishna et al., 2012). Similarities are found

within cyberstalking research, behaviours found to be focused on sexual or intimate contact with the victim included proclamations of love or exaggerated displays of affection (Chaulk & Jones, 2011; Al Mutawa et al., 2016). Perpetrators may also make reference to a previous relationship or engage in 'needy' contact (Al Mutawa et al., 2016). Offender actions may also have an overtly sexual motive, including sending pornographic images (Al Mutawa et al., 2016) or messages with sexual overtones (Reyns, Henson & Fisher 2012).

However, as much as it is necessary to distinguish between the use of online applications for consensual sexual encounters and negative contact, it is also important to emphasise the distinction between sexual contact designed to initiate a dialogue or receive sexual satisfaction on the part of the perpetrator and behaviour designed to provoke a negative response. Currently, few researchers have drawn a clear distinction between contact designed to force a relationship from offenders who lack the social awareness necessary to recognise their sexual overtures as inappropriate and behaviour which aims to use sex and sexual contact as a means of intimidating the recipient. An exception is the work of Dreßing et al. (2014), who discuss the impact of sharing private details on pornographic websites. Other behaviours which are clearly designed to use sex as an effective method of causing harm includes threats of violence, which may feature a sexual element (e.g. rape threats) and sending pornographic images or obscene messages designed to make the victim feel distress (Holt et al., 2012; Philips & Morrissey, 2004), as well as sharing real or forged intimate images and videos (Al Mutawa et al., 2016) on social media platforms, pornographic sites or with the victim's friends, family or colleagues (Al Mutawa et al., 2016).

Threats in Cyberspace

Threatening online behaviour may appear easier to identify than sexual cyberviolence as meaning and intent may be more transparent. However, due to a lack of visual cues or verbal

tone and the asynchronistic nature of engagement it is easier for perpetrators to dismiss a recipient's distress as a misunderstanding and their behaviour as a 'joke' which has been misinterpreted. This has not dampened public discussion, and threatening behaviour online has received a similar level of public scrutiny when compared to sexual contact, with employers producing guidelines for employees around what constitutes problematic behaviour (NHS, 2013) and new legal guidelines around prosecuting such behaviour, although these guidelines remain fraught with difficulty around meeting burdens of proof, as typified by the Elonis v. United States case¹.

Given the increasingly interconnected online and offline spaces we inhabit, it is unsurprising that researchers have explored the duality of opportunities and risks available online, from threatening cyberviolence to ready access to controversial material including 'snuff' sites and also pro-suicide communities (Lindberg, Oksanen, Sailas & Kaltiala-Heion, 2012).

Researchers have explored large-scale threats including school massacre threats (Lindberg et al., 2012) and those made by terrorist groups online (Chiluwa, 2017), but have also centred on the threats made between individuals. Researchers exploring cyberstalking have examined threatening contact online, defined by engagement in repeated unwanted contact (Reyns et al., 2012; Philips & Morrissey, 2004) and sending clearly intimidating messages (Pereira & Matos, 2016). This behaviour can be direct, which includes sending hurtful messages or distressing videos or threatening physical harm (Pereira & Matos, 2016; Fenaughty & Harré, 2013) or indirect, such as encouraging others online to 'stalk by proxy' (Dreßing et al., 2014). In terms of cyberharassment, threatening contact can include sending repetitive (Chaulk & Jones, 2011) harassing or obscene messages via various channels including live chat sites and

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¹ This case refers to a series of threatening Facebook posts made by Anthony Elonis towards his ex-wife which were serious and frequent enough to require intervention from the FBI. This case ascended through the United States legal system, eventually arriving at the Supreme Court. Controversy surrounding ambiguity in the statute used to prosecute and concerns around the implications for the First Amendment has resulted in a confusing legal state in which no clear definition of a true threat exists (Formichella, 2016).

applications (Al Mutawa et al., 2016; Moriarty & Freiberger, 2008), that are designed to instil fear or cause harm (Chaulk & Jones, 2011), sending threatening objects (Chaulk & Jones, 2011) or spreading rumours (Chaulk & Jones, 2011) and using material gathered to harass, threaten or intimidate (Finn, 2004). Offenders may also subject the victim to intrusive interactions, such as commenting on social media pages, adding the victim on social media sites or creating groups in the victim's name (Chaulk & Jones, 2011), as well as joining the same online groups as the victim and adding their friends on social networks (Chaulk & Jones, 2011). Offenders may also leave inappropriate messages on online forums or message boards (Moriarty & Freiberger, 2008). A review of cyberbullying research identified threatening or harassing actions which included sending hostile or threatening messages, posting harmful material about the victim (Al Mazari, 2013; Patchin & Hinduja, 2010), sending malicious messages to the victim or to others about the victim (Kokkinos, Baltzidis & Xynogala, 2016) and posting malicious or libellous material on social media (Patchin & Hinduja, 2010).

Humiliation in Cyberspace

Public humiliation has long been a means of restoring a sense of order or justice in the wake of 'moral transgressions', from stocks to trial by public opinion. As with threatening behaviour, it may appear that actions designed to humiliate another online may be more readily distinguishable as problematic than unwanted sexual overtures, although the behaviours can often be downplayed as an attempt, however ill-advised, at humour. There is also the added element of 'just desserts' with those shamed being seen as responsible for their own vilification due to their actions (Combs, Campbell, Jackson & Smith, 2010). With the rise in instant access to online communities and the prevalence of smartphones we now possess the ability to transmit information to thousands of individuals across the globe,

resulting in a culture in which there have never been more opportunities for online humiliation. As with any discussion around 'moral transgressions', the issue of context must be explored and the shifting nature of what is defined as wrong or worthy of shaming must be taken into account when exploring the focus of public humiliation. There is also the possibility of an individual seeking to cause humiliation as an extension of negative feelings towards another, however, this can quickly escalate within the echo chamber of social media and instances of small-scale humiliation between peers can rapidly spread across social media platforms.

Online humiliation and its negative consequences have been the focus of articles (Judah, 2015) and widespread debate. Researchers have sought to quantify these behaviours in relation to cyberharassment, identifying contact with others to defame the victim, posting messages which are visible to other users and spreading rumours designed to damage the victim's reputation (Dreßing et al., 2014). Offenders may also threaten to disclose embarrassing information to others or share upsetting photos or videos of the victim (Fenaughty & Harré, 2013), as well as publish content under the victim's name (Dreßing et al., 2014). In terms of cyberstalking, offenders may also stalk through disclosure of false information (Pereira & Matos, 2016), again demonstrating the overlap between cyberstalking and cyberharassment. Research into cyberbullying has suggested offenders may upload files or post messages or information on social media which are designed to ridicule the victim (Kokkinos et al., 2016; Al Mazari, 2013), including uploading and/or sharing embarrassing images and videos without consent (Patchin & Hinduja, 2010), as well as hacking accounts (Mishna et al., 2009), impersonating the victim, name calling and spreading rumours (Völlink, Bolma, Dehue & Jacobs, 2013; Mishna et al., 2012; Patchin & Hinduja, 2010).

Offenders may also post disparaging material anonymously (Mishna et al., 2009) or engage in social exclusion (Sabella et al., 2013).

Rigid Inclusion and Exclusion Criteria

Alongside the issue of overlapping behaviour is the widespread reliance on existing definitions. Rigidity of inclusion and exclusion criteria has been the result of the focus on these definitions and has resulted in studies limiting their samples to those classifiable according to offline necessities within the pre-existing literature, such as an existing relationship. This is an intrinsic part of offline interpersonal crimes like bullying and harassment, as without some knowledge of one another, an offence could not take place. The disembodied nature of online interactions removes this necessity, with perpetrators being able to target individuals they have never encountered before from across the globe. A recent example is the case of Matthew Falder who was able to target, manipulate, abuse and exploit forty-six victims he had never met offline (Davies, 2017). Whilst Navarro, Marcum, Higgins and Ricketts (2016) have refuted the presumption of an existing relationship in their research, others have used a lack of prior interaction as a criterion for exclusion. Sengupta and Chaudhuri (2011) have further differentiated between cyberbullying and cyberharassment by suggesting that cyberharassment is characterised as cyberbullying by a stranger, further demonstrating the lack of clarity around definitions of cyberviolence.

Similarly, the issue of repetition is contested within the literature. In terms of cyberstalking, some theorists argue it is necessary for the offender to make repeated contact (Reyns et al., 2016; Chaulk & Jones, 2011; Moriarty & Freiberger, 2008), as do Völlink et al. (2013) who propose cyberbullying incidents need to include frequent contact, an inclusion criterion supported by Al Mazari (2013) and Patchin & Hinduja (2010), as well as being carried out repeatedly (Mishna et al., 2009; Mishna et al., 2012). However, factors like repetition and

power imbalance are debated within cyberbullying research, as these behaviours are more obscure in an online context (Pettalia, Levin & Dickinson, 2013). Cyberbullying may also be more sinister than offline bullying because it can be intense and difficult to stop (Sabella et al., 2013), be perpetrated by a faceless assailant (Lazuras, Barkoukis, Ourda & Tsorbatzoudis, 2013) and material can exist online long after the incident has ended (Misha et al., 2012). Repetition can be difficult to prove, particularly if the offender acts anonymously and has the ability to create multiple accounts. It also narrows the experiences of victims to only those who can prove the same offender has repeatedly contacted them, which can be difficult given the relative anonymity available online (Al Mutawa et al., 2016). The need for repetition of behaviours also limits the experience of those who cannot prove repetition and ignores the distress which could be caused by an isolated incident or incidents which feature material which is shared and so can cause repeated victimisation.

Lack of Context Around Offender Motivation

As well as an overall lack of cohesion around approaches and definitions, there is also a lack of clarity about the motivations of offenders and whether this should impact on how such behaviour is classified. Jones et al. (2013) and Ybarra, Espelage and Mitchell (2007) distinguish between cyberharassment and unwanted sexual solicitation, identifying cyberharassment as being motivated by a desire to express aggression whereas sexual solicitation refers to encouragement to talk about sex when the victim doesn't wish to do so. Issues arise here from a lack of certainty around offender motivation. Whilst sexual contact may stem from sexual desire on the part of the offender, it may also stem from a desire to harass the victim (Lindsay, Booth, Messing & Thaller, 2016), something which is not clearly delineated by Ybarra et al. (2007). Offender motivation is difficult to establish in all research discussed here, as researchers have yet to focus on the motivations behind offending,

choosing instead to focus solely on the behaviours engaged in during offences. There is also the issue of wilful harm (Al Mazari, 2013), which is difficult to establish, and the need to prove the victim is unable to defend themselves (Völlink et al., 2013), within a relationship which demonstrates a power imbalance (Whittaker & Kowalski, 2015) although this is highly subjective, particularly within an online context. It appears that the lack of focus on motivation stems from the difficulty in establishing motivation, but this does not explain the rigidity of definitions used as many feature elements that are difficult to establish (e.g., wilful harm), which leads to interesting questions about the lack of focus on reasons for engaging in cyberviolence within existing research.

Cyberviolence: What Do We Know?

A review of the literature demonstrates an intersect between definitions of cyberstalking, cyberharassment and cyberbullying. This overlap can be seen to stem from the essentially interpersonal nature of these offences and the limited definitions provided by existing research. Difficulties arise when applying strict categorisation for inclusion, such as the relationship between victim and offender; in cyberbullying, a relationship is presumed to exist, whereas cyberharassment and cyberstalking could be possible without a prior relationship between victim and offender (Navarro et al., 2016). Whilst it is useful to differentiate according to certain pertinent distinctions, this distinction appears reductive. Given the increasing prevalence of online relationships, it is unfeasible to continue to apply existing offline definitions to online interactions. Another issue with existing definitions is that they specifically exclude behaviours. For example, Jones et al. (2013) clearly state that cyberharassment does not include sexual solicitations, which leads to a paucity of understanding about sexual contact online at a time when online sexuality has never been more prevalent or accepted.

A further obstacle within the current field of research is the difficulty faced when seeking to establish prevalence. Depending on the focus of the study, the frequency of cyberviolence is not always present. It has been noted by Pabian, De Backer and Vandebosch (2015) that when this information is presented it varies by the type of measurement and the definitions used by researcher. When reported, cyberbullying victimisation ranges from nine percent (Slonje & Smith, 2008) to forty percent (Goodboy & Martin, 2015) in youth samples, compared to thirty-three percent who reported cyberharassment (Ybarra & Mitchell, 2008). In terms of perpetration, estimates vary between ten percent (Fenaughty & Harré, 2013) and a quarter (Bogolyubova, Panicheva, Tikhonov, Ivanov & Ledovaya, 2018) to a third of participants (Pabian et al., 2015). Attempts have been made to explore prevalence within different cultural contexts, for instance Bogolyubova et al. (2018) report that almost half of the Russian children sampled had experienced cyberbullying and thirty three percent identified as perpetrators. A further impediment arises from the propensity of researchers to refer only to the overall prevalence of the behaviour under exploration (e.g. cyberbullying) rather than the frequency of the behaviours classified under this definition. Of those studies that do refer to specific behaviours, rates of sexual cyberviolence vary. For example, Ybarra and Mitchell (2008) report that fifteen percent of the youths surveyed had experienced unsolicited sexual contact, compared to Finn (2004) who found that almost half of the sample had received unwanted pornography.

Efforts to advance knowledge and understanding around cyberviolence, have been hampered by a belief in the applicability of offline definitions to online contexts. The result is a field that has essentially become circuitous. As has been demonstrated, there are numerous overlaps between existing definitions and behaviours identified as being indicative of cyberbullying, cyberstalking and cyberharassment. Whilst some intersection between

cyberviolence behaviours is to be expected, it is clear the emphasis on categorisation has prevented expansion of knowledge and limited the scope of studies. A review of the literature suggests behaviour can be split into contacting (sending messages directly or to others about the victim), sharing (material which is unpleasant for the victim and others to see or through rumour spreading or disclosure of information whether real or forged, impersonation or contact with peers) and inciting (encouraging others to engage in cyberviolence). The commonality across behaviours suggests that only the classification changes, thus emphasising the arbitrary nature of labelling according to distinct offline definitions. This is further emphasised by the crossover in terminology applied by researchers, particularly in cyberharassment and cyberstalking cases where stalking and harassment appear to be interchangeable (Pereira & Matos, 2016; Dreßing et al., 2014).

It is therefore argued that for the field of cyberviolence to advance research should focus less on defining negative online behaviours according to offline definitions, and instead move towards a holistic approach which explores cyberviolence as a whole, defined by the overarching theme of behaviour. The benefit of this approach is two-fold: firstly, application of a less restrictive definition allows for the inclusion of a wider range of victim and perpetrator experiences. This would enable researchers to develop greater knowledge about behaviours classified as cyberviolence from victim and perpetrator perspectives, thus expanding the existing field of research. Secondly, this allows the field of cyberviolence to develop as a phenomenon distinct from 'traditional' offline behaviours. It is clear in each area discussed that a continuum of behaviours exists, ranging from annoying and disappointing to severe, persistent and pervasive (Sabella et al., 2013). A more inclusive approach to cyberviolence would allow for greater understanding of this continuum and allow for indepth exploration of behaviours rather than categories.

Much of the existing research has been conducted by a limited number of researchers, using the same definitions, for example, the definition provided by Hinduja & Patchin (Pettalia et al., 2013; Sabella et al., 2013). This leads to a very narrow conceptualisation of cyberviolence, which limits knowledge about this phenomenon. Research has also focused on young people's experiences (Vollink et al., 2013) of cyberviolence or has utilised university samples (Lindsay et al., 2016). Whilst many young people are proactive users of the Internet and social media, recent statistics indicate that Internet use is prevalent worldwide (Statista, n.d.) and older individuals are increasingly accessing social media (Statista, n.d.). This leads to a wealth of experience which existing research has not explored or identified. As a result, the utility of such findings and their applicability to those accessing the Internet is limited. Similarly, the majority of research exists within specific cultural contexts, namely the UK and US. Research does exist from Portugal (Pereira & Matos, 2016) and Dubai (Al Mutawa et al., 2016). However, the findings from this research cannot be generalised to findings from other studies, and so there is palpable need for a study which draws on a cross-cultural sample to reflect the global nature of social media.

Conclusion

It is clear that the current field of cyberviolence has been rendered opaque due to previous research which relies on defining cyberviolence according to divisive silos leading to a fractured field of knowledge. For progress to be made, focus should shift from distinct labelling of groups of behaviours to placing emphasis on the overarching theme of behaviour. Existing measures have demonstrated that cyberviolence can be conceptualised according to three main themes: sexual, threatening or humiliating contact. Using these three overarching themes it may be possible to garner a more cohesive picture of the prevalence of

cyberviolence and allow conceptualisations to move beyond the application of 'traditional' behaviours to an online context.

It is not only pertinent to explore the practical difficulties which have resulted in this lack of clarity but also the theoretical underpinning which supports them. Given the rapid advancement of technology and the meteoric rise in engagement with online spaces, especially social media, it is necessary to explore how pertinent established theories have transitioned into online contexts.

2. The Theory of Cyberviolence

Initially, academic interest in the creation of online spaces, identities and relationships appeared to be following the trajectory of virtual development in the wake of the inception of the Internet. However, theorists, including Vera-Gray (2017), feel that this interest has waned at a time when the impact of the online space has never been more significant. As engagement with social media and the Internet has increased, so has the incidence of negative online behaviours, which have been described using several labels (as discussed in Chapter 1) with wide-reaching implications for those victimised (Hinduja & Patchin, 2013). The tangible offline consequences of online behaviour should be motivation for scholars to explore this phenomenon, however this does not appear to be the case, apart from a few notable exceptions. This review highlights the key theoretical areas in which scholarly attention has been paid to negative conduct within the cybersphere, particularly in relation to social networking and interaction.

Given the increasing propensity for social interaction online, it is not surprising that the social sciences have attempted to understand the wider social processes which shape conduct within online spaces. It is perhaps surprising that there appears to be less attention paid to the phenomena of negative online behaviours, given public concern about this in the media, and there has been little attempt to provide a theoretical conceptualisation of this new platform.

One exception to this is feminist theory, with proponents demonstrating development of theoretical models which have sought to conceptualise and draw attention to cyberviolence.

Feminism, Feminist Theory and Research

Feminism, defined by the Oxford English Dictionary as "the advocacy of women's rights on the grounds of the equality of the sexes" is a political, ideological movement with a varied and complex history. Whilst the term can encompass a wide range of social movements, they share a common goal—the political, personal, economic and social equality of the sexes (Hawkesworth, 2006). Feminist movements have campaigned for a wide variety of causes including women's right to vote, equal working conditions, access to education and reproductive rights and have made significant contributions to political and legal changes regarding experiences of sexual and physical violence.

Feminist ideals and principles have had an impact on research and policy as feminist academics have developed their research agenda. This has led to scholarly focus on a wide range of behaviours, attitudes and beliefs including sexuality, with research focused on demeaning sexual practices (Sun, Ezzell & Kendall, 2017), social acceptability of negative sexual attitudes (Case & Coventry, 2017) and wider narratives of sexual violence within popular culture (Ferreday, 2017). At its most basic level, feminist theory is complex, given that defining theory generally and feminism more specifically is a topic of much debate (Radtke, 2017). However, this complexity is seen as a positive by some, with Ahmed (2000) highlighting that what 'counts as' feminism is diverse, suggesting that conception of theory should change from a label to an action, that theory should be a critical process of analysis which remains unfixed and evolving. This allows for the development, renegotiation and even dismissal of theories as part of an ever-changing process of knowledge and understanding. The fluidity of this process allows for greater understanding of the sociohistorical contexts in which theories develop, as well as the interconnection of theory and practice, with much feminist theorising occurring outside of academic contexts (Ahmed, 2000). This has resulted in an adaptable perspective from which to explore continued computational and technological developments and their impact on our socio-cultural norms.

Particularly within social science contexts, feminist theory occurs in places where social norms are contested, with an emphasis on addressing the wider social processes which link

contexts (Radtke, 2017). Within feminist psychology, focus rests on exploration and examination of the lives of not only women and girls but also those marginalised due to sexuality, gender and social status, in an attempt to highlight varied perspectives (Radtke, 2017). One strength of feminist theory is that it accepts that generalisation of analysis within a socio-cultural context is necessary to advance social change but does not seek to make universal generalisations (Radtke, 2017). This malleability allows for identification of common characteristics which allows for accurate and useful labelling of experiences, something which is vital for feminists, according to Kelly (1988).

Feminist Theory and Cyberviolence.

Whilst attention has been paid to the gendered nature of many offline offences, the increasing online nature of daily life has led to a host of opportunities for abuse and harassment to take place. The cyclic nature of this gendered cyberviolence has been noted by Jane (2014), highlighted in the case of Anita Sarkeesian who endured a targeted cyber-mob attack as a result of her campaign to raise awareness about sexism and misogyny in gaming and its impact on violence towards women. This attack included having her personal details circulated online, her Wikipedia page defaced and being the recipient of offensive and violent tweets². Another prominent example is the case of Caroline Criado-Perez, notable for starting a campaign to have Jane Austen placed on the new £10 note, who was told she would be 'pistol whipped' into unconsciousness in front of her children. This impacted Criado-Perez physically and emotionally and left her feeling 'total and utter terror' (Jane, 2014). This demonstrates the real harm caused by cyberviolence and the wide-reaching impact it can have on recipients' lives, leading to a significant need for scholarly exploration of abusive and negative online behaviour.

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² An example of the types of tweets Sarkeesian received came from one user called @DeadwingDuck who tweeted "Anita. I mean this seriously. From the bottom of my heart. Kill yourself, cunt.".

Compared to other schools of thought, the flexibility inherent in feminist theory has made it particularly applicable to online spaces as research and ideas have adapted and developed in line with advancements in technology. Feminist theorists have made significant progress in attempting to understand the new frontier of gender-based violence and are among the few to take considerable notice about the real impact of cyberviolence. As a result, theorists have called for greater scholarly attention across the social sciences, not only because cyberviolence has become such a pervasive form of Internet discourse but also because it features many self-generating properties which means it is has the potential to become the dominant discursive structure online, if left unchecked (Jane, 2014). Given that such misogyny and hostility would be unacceptable in offline settings, online spaces provide an unrivalled opportunity for analysis of the pervasiveness of misogyny in a setting which appears to have less formal structure and sanctions around acceptable conduct. It is also important to acknowledge and attempt to reduce the harm caused by cyberviolence as this has far reaching consequences for recipients and can lead to a reduced engagement with online spaces for those targeted. For the cybersphere to be inclusive, an understanding about not only the ways in which people harm each other online but why they do so needs to be developed (Jane, 2014).

Jane (2017;2016; 2015; 2014) has been one of the most prolific researchers of cyberviolence, termed e-bile within her research, and has amassed a significant collection of examples of online vitriol over approximately twenty years. This has resulted in a richly detailed dataset that demonstrates the increasingly violent nature of abuse of women online (Jane, 2014) and has provided an opportunity to develop a theoretical model of behaviour. This dataset also highlights the ubiquitous nature of e-bile which has become a daily reality for many women when interacting with online spaces (Jane, 2016). The chronological scope of Jane's dataset

has allowed for a pinpointing of growth in online incivility and antisocial communication which has shown a marked increase in the number of exchanges which feature sexualised content, thus demarcated as 'gendered cyber-hate', since 2011. Much of this abuse is so violent that it can be conceptualised as a form of terrorism which is resulting in many women choosing to remove themselves from online spaces (Jane, 2016). Analysis of abuse also highlights the formulaic nature of such contact, defined by conspicuous interchangeability with men relying on the same sentiments, slurs and threats (Jane, 2014). This consistency results in a scenario in which it could be any man talking to any woman. This leads to the conclusion that such encounters are not about an individual man's issue with an individual woman but rather speaks to a bigger issue of gender inequality and sexism. Jane (2016) further emphasised the prescriptive nature of these exchanges by building a 'Random Rape Threat' generator (RRTG), a computer programme which splices, shuffles and restructures real life examples of 'Rapeglish'³. Using data from her extensive archive, Jane (2017) developed a 'blueprint' of Rapeglish which highlights the ubiquitous underlying structure of this discourse⁴. When data was added into the RRTG, it had the ability to generate more than eighty billion unique examples, which equates to more than 23 examples per woman on Earth. The rationale behind this programme was not only to raise public awareness about the treatment of women online but also to highlight that this material is about gender, not the individual woman receiving it, in the hope of shifting attention away from blaming victims for what they may have said or done to provoke the perpetrator and to reassure individual women that they are not the only one receiving such messages.

³ Rapeglish is defined as an "emerging and increasingly dominant online dialect whose signal characteristic is graphic and sexually violent imagery...and strident denials that there is any misogyny on the internet whatsoever" (Jane, 2017 pp. 2). This forms general patterns which include attacks on women for being unattractive, too sexual or not sexual enough, mentally ill, unintelligent, politically misguided, inferior or for engaging in misandry (Jane, 2017).

⁴ Rapeglish follows a clear pattern of a salutation (e.g. Fucking shut it you), adjective (e.g. ugly), noun (e.g. bitch), transitional phase (e.g. I hope you), outcome part one (e.g. drink bleach), outcome part two (e.g. while your children watch) and a rationale (e.g. coz you're a stupid feminist arsehole).

Key offline theories have also been applied to online contexts, with Kelly's (1988) continuum of sexual violence being applied to 'image-based sexual abuse' (McGlynn, Rackley and Houghton, 2017). This research posits that image-based sexual abuse should be conceptualised as but one form of a range of sexualised, gendered forms of abuse which McGlynn et al. (2017) define as the 'continuum of image-based sexual abuse' which fits within Kelly's (1988) continuum of sexual violence. The continuum developed by McGlynn et al., (2017) acts as a descriptive and conceptual tool which allows for increased understanding about this relatively novel form of abuse, experienced predominately by women, which utilises increasingly accessible technology (e.g. smartphones and social media) to propagate harm. This continuum has also developed existing knowledge around image-based sexual abuse, whilst much emphasis has been given to 'revenge porn' (sharing sexual material of a former partner after the breakdown of a relationship), there are several related behaviours which also require academic attention⁵. As with Jane's (2017) RRTG, McGlynn et al. (2017) have applied Kelly's (1988) continuum in a cyber context as a means of raising awareness about the treatment of women online and to highlight the range of behaviours facilitated by access to technology. This has also expanded Kelly's offline theoretical model to take into account new avenues for abuse, namely sexual cyberviolence.

In contrast to the research discussed in Chapter 1, within feminist research the motivations behind cyberviolence have been explored, with McGlynn et al. (2017) noting that the emphasis on revenge leads to an inappropriate emphasis on incidents in which there is a prior relationship between victim and perpetrator. Whilst some instances and actions, such as

⁵ These include 'upskirting' (the act of taking covert images of women's pubic areas and posting these online), sexualised photoshopping (the act of photoshopping another person into an image of a sexual scenario), 'sextortion' (the practice of coercing an individual into sharing sexual images, followed by threats to ensure further image creation or financial gain. This theory also covers the hacking of phones, webcams or cloud storage accounts to obtain consensually created images for distribution) and images of sexual violence (the practice of sending images/videos without consent to do so).

revenge porn, may have personal feelings of revenge attached, this does not explain all cyberviolence. Engaging in acts of cyberviolence, particularly sexual cyberviolence, can be part of male bonding (McGlynn et al., 2017), a tool for gaining notoriety or 'making a joke' (DeKeseredy & Shwartz, 2016), a means of expressing general contempt and disapproval of women (Jane, 2014) or be part of an attempt to remove women from online spaces (Halder & Jaishankar, 2009). The performative nature of flaming or trolling allows acts to serve as a masculine display of skill and to highlight a powerful online identity (Vrooman, 2002, cited in Lewis, Rowe & Wiper, 2017) and, given the often public nature of online abuse, the opportunity of playing to the crowd can lead to hyperbolic, exaggerated displays of communication. This range of motivation demonstrates the complexity of cyberviolence and demarcates it from 'traditional' offending in terms of the apparent likelihood of a 'random attack' by a stranger, something which is a relative rarity offline.

Responses to Cyberviolence.

In tandem with research around offending behaviour, there has become an increasing focus on the reactions of those victimised. One example is 'DIY digilantism' in which victims use tactics including 'naming and shaming' to highlight their victimisation and attempt to provoke consequences for the offender (Jane, 2014). Whilst such tactics are understandable given the obvious unpleasantness associated with receiving online abuse, the encouragement of such tactics is problematic, as noted by Jane (2016), because it reinforces dominant 'cyber norms' which places responsibility on recipients to manage their own victimisation, rather than the platforms themselves and appropriate legal systems. If these 'digilante' tactics are not supported by further intervention at wider levels, then it is unlikely that any significant changes will result. Whilst one victim may successfully end their own abuse by directly challenging a perpetrator and may raise awareness about such behaviour, this does not

prevent revictimization or the abuse of others. It also encourages a shift from public to private spaces, thus removing the issue of cyberviolence from public consciousness. Individual cases are not isolated nor are they exceptional, as evidenced by Jane's extensive database, they are indicative of a wider pattern of abuse and highlight the prevalence of attitudes which condone such behaviour. However, given the oppressive nature of cyberviolence and the lack of support from platforms, it is understandable that victims would wish to fight back and explains their engagement in digilantism, the issue stems from this behaviour residing within a broader cultural focus on public shaming and vengeance. In terms of defining cyberviolence, as discussed in Chapter 1, this drive to retaliate is problematic for definitions which require a power imbalance (Vollink et al., 2013), further emphasising the need for more inclusive definitions. Whilst it can provide a feeling of empowerment and catharsis for recipients, being able to identify the assailant in any meaningful way is atypical, suggesting this approach is not feasible for many victims of cyberviolence (Jane, 2016).

Research by feminist academics has drawn attention to abuse which is often minimised by the media, public and policy makers (McGlynn et al., 2017), particularly cyberviolence which is often seen as less severe than 'traditional' behaviour. However, whilst feminist theory has made a significant contribution to existing knowledge about cyberviolence, it cannot be seen as the whole picture. As Jane (2015) acknowledges, women can be perpetrators as easily as men can be victims, a view supported by Demos (2016), who found that half the tweets sampled containing the term 'slut' were sent by women. Whilst this can be, in part, explained within the wider context of patriarchal masculine narratives which have shaped online spaces, there remain questions about individual motivations for behaving in negative ways online for all users of social media. Similarly, it isn't feasible to suggest that the Internet creates misogynists, those who engage in such behaviour online must hold such beliefs offline

(Shaw, 2014). However, whilst the digital realm cannot create an attitude merely due to its existence, it can create a space in which such behaviour is rationalised. Individuals who display misogynistic attitudes online will surely hold such beliefs in other areas of their life but may use the anonymity and relatively lax system of restraint or punishment for violation of such social norms within these spaces to act out these beliefs. To explore these factors, it is necessary to turn to theories and disciplines which look at the impact of wider social structures on behaviour as well as individual characteristics, in order to shape a view of the wider online community and its players, both targets and perpetrators, to develop a clearer picture of the daily interactions taking place in cyberspace.

Historical Perspectives on Social Learning

Social learning theories have been applied to individual behaviour due to their ability to explain the ways in which prior experience influences the expression of behaviour (rather than viewing behaviour as a simple response to environmental cues) and allowance of situational influences (Tittle, Antonaccio & Botchkovar, 2012). Social learning theory has been applied to a range of behaviours, from smoking (Ali, 2012) to knowledge conversion in the workplace (Lu & Lee, 2016) as well as criminality (Tittle et al., 2012). Existing research exploring the impact of social learning and crime has focused generally on offline offences, which is unsurprising given the relative infancy of cybercrime when compared to 'traditional' offending. Some of the most widely recognised models include Sutherland's (1947, cited in Bowman & Freng, 2017) theory of differential association, Piaget's (1932, cited in Cowan, Longer, Heavenrich & Nathanson, 1969) theory of cognitive development and Bandura's social learning theory (Bandura & Walters, 1977).

Many existing theories have been challenged and, in the case of Piaget, actively rebuked by the subsequent work of Bandura (Cowan, Longer, Heavenrich & Nathanson, 1969) which is

unsurprising given the significant amount of time which has elapsed since their inception. As a result of this, the relevance of many of these theories to modern life must be explored, such as Sutherland's (1947) theory which would argue that media representations are secondary to 'real world' criminogenic influences. Given the context in which this theory was postulated, it is clear to see that its applicability to cyberviolence is minimal. It is unlikely that Sutherland ever anticipated the Internet revolution and that the presence of online peers and media representations could become such an intrinsic part of everyday life. This cultural shift has led to a need to re-examine these theories in light of the current cyber landscape which has infiltrated our daily reality to identify their potential utility online or to refute their relevance in such contexts.

Aker's Social Learning Theory.

One of the most widely cited theories of deviant behaviour is Aker's social learning theory (social learning theory) which built on Sutherland's (1947) theory of differential association through expansion into four theoretical concepts which coalesce into a complex and ever reciprocal relationship between social learning and misconduct (Tittle et al., 2012). Variations of this theory have been applied to a wide range of behaviour, including substance misuse (Akers, La Greca, Cochran & Sellers, 1989; Akers & Cochran, 1985), but have been predominantly applied to deviant and criminal behaviours, including intimate partner violence (Cochran, Maskaly, Jones & Sellers, 2017) and have also explored the role of gender in fear of crime (Rader & Haynes, 2011).

The first of Aker's concepts is differential association (the process through which one is exposed to positive and negative definitions of deviant behaviour) which features both normative and behavioural dimensions, with normative dimensions referring to the pattern of values one is exposed to through social associations and behavioural dimensions relating to

direct and indirect association with significant others and reference groups. These associations vary between individuals according to the frequency, intensity and duration, with associations between significant others, occurring early in life and lasting for a long period of time with regular reinforcement being more impactful on an individuals' behaviour. Definitions denote personal attitudes, judgements and meanings attached to behaviours, with greater approval serving to defuse prohibitive moral reasoning against the act. These definitions can act as cues for an individual to commit a particular act, depending on whether the definition is positive, and therefore normalising, or negative. These definitions can be defined as specific (i.e. normative judgements relating to a specific form of behaviour) or more generalised (i.e. evaluations which allow one to conform to widely held beliefs). Such definitions can also be neutralising within context-specific scenarios which allows the individual to justify a behaviour which may be generally disapproved of. Imitation (mimicry of behaviour which is perceived as being reinforced by significant others) is influenced by operant conditioning, according to Akers, as behaviour is reinforced or restricted according to the consequences experienced, whether these are positive (i.e. lack of punishment) or negative (i.e. punishment). This reinforcement can be social, such as acceptance from peers, or non-social, such as enjoyment of the 'thrill' of illicit behaviour (Cochran et al., 2017). The final concept within this model is differential reinforcement (criminal behaviour is attained, reinforced and thus repeated, or repressed and desisted from, according to the individual impact of past, present and future reward/punishment relative to the differential reward/punishment related to alternate actions) which is the mechanism at the centre of social learning theory, with past reinforcement influencing deviance independently as well as in conjunction with the other social learning theory concepts (Tittle et al., 2012). Direct influence can be related to the forming of habitual behaviour due to previous conditioning and indirect influence can relate to attitudes and anticipated punishment or reward for

behaviour which can have an impact on an individual's engagement in deviant behaviour (Tittle et al., 2012). This theory posits that the group which exerts the most significant influence on an individual's reward and punishment will exert the greatest influence on their behaviour; thus, time spent with deviant peers will expose an individual to justifications for deviant behaviour.

Aker's concepts are interrelated with positive and negative definitions of deviance stemming from differential association and reinforcement as well as imitation of peers (Cochran et al., 2017). Deviant behaviour is thus a result of intensity, frequency and duration of exposure to significant others who act as the source of an individual's evaluative judgement about the apposite nature of the behaviour. These individuals are also role models whose behaviour is imitated when it is seen to be positively reinforced and are the principal foundation of notions of reward and punishment for the individual's behaviour. This model explores variation in crime and deviance rates by identifying structural variation in 'macro-levels' of criminality (e.g. age, social class and race) and suggests variation in crime and deviance rates can be explained by one's location within wider social structures and positions within social networks, with these differences being mediated by social learning theory as identified by Akers' four main social structure components: differential social organisation (the collective structure of crime within the social structure under examination), differential location in the social structure (the location of groups within the social structure including one's position within these structures), theoretically defined structural causes (the influence of various structural theories of crime which are thought to account for social conditions which impact positively on deviance and crime) and differential social location in primary and secondary reference groups (the personal networks and groups which directly impact the individual) (Morris & Higgins, 2010). These link to the differential association component in Aker's

theory and act as proxies for social control and socialisation. This component provides the social context in which Akers' other factors can interact with the individual and is vital here because social conflict and differential organisation of larger society are reflected within this dimension which allows for exploration of the variety of social roles determined by an individual's characteristics (Morris & Higgins, 2010).

Akers' Social Structure and Social Learning (SSSL) model builds on the four concepts outlined above. These components form a dynamic process in which each concept interacts with every other and starts with the relationships one has with deviant and non-deviant individuals, termed differential association, with the most significant interactions occurring between intimate groups such as family members (Holt, Burruss & Bossler, 2010). The SSSL model elaborates on Akers' discussion around the mediating effects of the social learning process on macro and micro social structural effects on an individual's behaviour, suggesting four main dimensions within the social structure (Holt et al., 2010). These include differential social organisation (collective social factors such as demographic distribution, which are related to crime), differential location (micro-level characteristics including gender and age, which indirectly place the individual within the wider social structure), theoretically defined aspects of social structures (aggregate level constructs related to crime, including anomie and class oppression, which can lead to exposure to illegitimate reward structures and increased acceptability of criminal behaviour) and, finally, differential social location (membership of reference groups which can impact on deviant behaviour) (Tittle et al., 2012; Holt et al., 2010). However, as Tittle et al. (2012) point out, the impact of the socio-cultural environment is indirect, making it feasible for the context of social learning to vary from place to place, allowing for variation in criminality but still allowing for the theoretical possibility that the social learning variables identified by Akers are applicable everywhere (Tittle et al., 2012).

In sum, social structural factors impact on deviant behaviour at macro and/or micro levels due to individuals being placed within contexts which expose them to delinquent individuals whom they can imitate or who reinforce their engagement in deviant behaviours. These social structural factors build on the four social learning components identified by Akers and can influence future behaviours.

Social Learning Theory and Cybercrime.

Akers' social learning theory is one of the most established criminological theories, however few scholars have explored its ability to "mediate the effects of either micro-or macrostructural constructs on crime" (Holt et al., 2010, p.32). In recent years, this theory has been applied to online deviance (Holt et al., 2012) including digital piracy (Miller & Morris, 2016; Morris & Higgins, 2010) and cyberbullying (Li, Holt, Bossler & May, 2016) and has found empirical support. Morris and Higgins (2010) have suggested that differential association (i.e. exposure to deviant peers) is at least as reasonable an explanation for engagement in cyberdeviance as it is for traditional offending. This is particularly pertinent when considering the educational component intrinsic in use of technology. As Holt et al. (2010) suggest, although technology has become more user friendly, it is still often necessary for individuals to seek support from others to engage in cybercrime, especially piracy or hacking, and so social learning theory is an inherently significant framework for understanding cyber offending. Existing research into the impact of social learning and cybercrime has found a strong relationship between engagement in cyberoffending and deviant friendship groups (Holt et al., 2010). The significance of deviant definitions, under Akers' model, has also been supported in relation to piracy, however the impact of positive and negative reinforcement has not been explored fully in relation to cybercrime with the little existing research available (Miller & Morris, 2016) demonstrating mixed results (Holt et al., 2010). In contrast, studies

that have explored imitation have found strong effects, although this is outdated, and effects vary according to the type of cybercrime committed (Skinner & Fream, 1997, cited in Holt et al., 2010). Whilst some studies have reported mixed results (Higgins & Makin, 2004 cited in Morris & Higgins, 2010), others have found moderate support (Morris & Higgins, 2009) for social learning theory within online contexts, as noted by Miller and Morris (2016) who found that virtual peers exerted an influence over engagement in digital piracy. An issue with this body of research stems from its reliance on convenience sampling of college and university students which leads to questions about the applicability for online populations generally.

Little research exists which explores the potential mediating effect of the social learning process on social structural effects on cybercrime within the SSSL model. One reason for this is the relative complexity of analysing each of the four components of the social learning theory and the four components of the social structure (Holt et al., 2010). One partial exception to this is the work of Holt et al. (2010) who suggests the structural factors within the SSSL model have the most significant impact on cybercrime, if they place an individual within delinquent peer contexts which can influence Akers' four social learning components, particularly in relation to hacking crimes. The results from Holt et al. (2010) suggest support for the relationship between cybercrime and social learning processes, with their model accounting for eighty-one percent of cyberdeviance. As with other studies (Morris & Higgins, 2009), Holt et al. (2010) also found support for the significance of differential association and favourable definitions as part of the social learning construct. Some support was found for the SSSL model, with women and those from minority ethnic groups being less likely to engage in deviant social learning processes and so were less likely to commit cyber-deviance. However, this research did not explore the effects of macro-structural factors due to a lack of

aggregate level measures. As previously noted, collection of data at this level is inherently difficult, although necessary for a true understanding of Akers model. As with many studies into cyberviolence, this research utilised a cross sectional design and so cannot account for social learning over time, a sample of college students was also utilised which does not expand the limited scope of the current field of research. There is also a dearth of research exploring the implications of social learning on cyberviolence, with the exception of the work of Li et al. (2016).

General Theory of Crime.

In contrast to Akers' social learning theory, the general theory of crime, also referred to as self-control theory, developed by Gottfredson and Hirschi (1990), claims to explain all types of deviant behaviour and is one of the most widely cited and empirically tested models (Siegmunt, 2016). This is a 'classic control theory' which suggests motivation is invariant, it is constraint which differs between those who are criminals and those who are not. Gottfredson and Hirschi (1990) posit that low self-control is the most significant predictor of criminality and support Akers' assertion that the family dynamic is the most important area for examination. Under this theoretical framework, crime is defined as the propensity for engaging in criminal acts, rather than a reliance on judicial terms. This means there is no distinction between serious and trivial or violent and non-violent offences. Crime, according to this theory, requires little skill, provides easy satisfaction, has few long-term benefits and results in pain for victims. As a result, those who engage in criminality must have personal qualities which compliment these factors, namely being impulsive, insensitive short-sighted risk takers who lack self-control (Gottfredson & Hirschi, 1990). This theory works from the assumption that we are all rational decision makers who weigh up the potential cost and benefits associated with our actions and will choose the action which causes the least amount of negative repercussions and so those who are impulsive and have low self-control will find deviance attractive because they lack the ability to see the consequences of their actions (Donner, Marcum, Jennings, Higgins & Banfield, 2014). Such a blanket approach has obvious ramifications, given the various factors which lead to engagement in crime, including factors which may be outside of the individual's control (i.e. poverty) and the potential distinctions between types of crime (e.g. interpersonal versus financial). Self-control is something which develops during the lifespan, with differences in levels of self-control stemming from familial socialisation. Low self-control is thought to be a result of lack of parental influence, lack of punishment for inappropriate behaviour and general ineffectiveness from parental influences. So significant is the impact of parents in this theory that their influence is thought to be able to mitigate criminal acts entirely (Siegmunt, 2016). Given that this general theory is suggested to explain all deviance, not just criminality, Gottfredson and Hirschi (1990) have suggested that six character traits- impulsivity, insensitivity, physical as opposed to mental focus, risk-taking, short-sightedness and being nonverbal all coalesce as one trait in individuals who have a propensity to engage in various types of deviance including smoking and substance use, gambling and illicit sex, behaviours thought to be 'analogous' to crime (Donner et al., 2014).

The general nature of crime under this theory, with all offences being seen as essentially trivial and of little long-lasting consequence (Siegmunt, 2016) has been criticised and indeed some have claimed that not all crime can be classified under Gottfredson and Hirschi's (1990) theory, an example being white collar crime (Friedrichs & Schwartz, 2008, cited in Siegmunt, 2016) although this has been contradicted by Gottfredson and Hirschi (1990) who suggest only subtle differences exist from other more 'usual' crimes. Gottfredson and Hirschi (1990) also use the terms self-control and criminality interchangeably and have argued that

low self-control is a more appropriate concept than criminality. This is due to the lack of special characteristics needed to be a criminal and so referring to those who engage in crime using a label like criminality unnecessarily marks them out as distinctly 'other'. Whilst the impracticality of demarcating 'criminals' and 'non-criminals' as separate classes of people can be accepted, particularly given the socio-cultural impact on morality and thus criminality, it could be argued that it is just as impractical to assign such significance to one aspect of an individual's character, in this case self-control, presumably because not all individuals with low self-control commit crime.

Whilst this is a general theory of crime, rather than one of victimisation, Gottfredson and Hirschi (1990) have suggested that the relationship found between low self-control and offending can be easily applied to victimisation, with those victimised being equally impulsive, insensitive, short-sighted and willing to take risks. In the same way that those who commit crimes do not take into account the full scope of the consequences of their actions, those who are victimised also engage in risk behaviour and engage in an 'unadvised' manner which puts them at increased risk of victimisation. This approach is in many ways problematic, in that it places responsibility on victims for their victimisation and suggests that this is an equal measures exchange in which both parties are to blame for the event taking place. This is particularly pertinent when considering cyberviolence, given that many victims are targeted whilst engaging with social networking platforms in line with community guidelines, rather than in any behaviour which could be defined as deviant.

The General Theory and Cyberviolence.

More recently, a growing body of research has explored the relationship between self-control and cyberdeviance (Holt et al., 2012), however there has been a lack of diversity within this research with a heavy focus on digital piracy, making this field of research extensive but

inherently limited in scope (Donner et al., 2014). One exception to this is research conducted by Donner et al. (2014) who explored low self-control and prevalence of cyberdeviance (e.g. illegally downloading files) and cyberviolence (e.g. posting nude photos without permission). The results show support for Gottfredson and Hirschi's (1990) theory that self-control is a predictor of deviance, in this case cyberdeviance. However, this study is not without flaws, the sample utilised consisted of a convenience sample of undergraduate students with an average age of 20, replicating the general issue with this field which has heavily focused on juvenile populations. Whilst it is useful to analyse the experiences of this age group, it does not offer a representative view of self-control in those who utilise the Internet. Research into social media is also absent, it was not possible to locate a study which has explored the utility of the general theory in online social networking contexts. This is unusual given the relative wealth of opportunity for 'snatch and grab' attacks which require little planning or forethought and can be committed by anyone with access to social media. As noted by Silic and Back (2016), who suggest social media sites present a new 'security hole' which facilitates malicious attacks online.

General Theory, Social Learning Theory and Cyberviolence.

More recent research has suggested that, rather than continuing to see the general theory and social learning theory as distinct and competing, studies should examine the impact of both low self-control and social learning theory variables to predict engagement in behaviours such as cyberbullying (Li et al., 2016). Research has found that social learning variables may act as mediators between low self-control and cybercrime when more robust social learning theory indicators are included within the social learning process (Holt et al., 2012). The apparent overlap of these theories has been explained as a result of criminal propensity interacting within social settings that exacerbate individual characteristics which impact on

criminal activity. However, research by Holt et al. (2012) has suggested that the impact of low self-control becomes less relevant as peers become more deviant, making it unclear whether peer association mitigates the effect of low self-control on deviance. This research found peer offending has a greater impact on cyberdeviance than individual low self-control and was able to consistently predict each type of cyberdeviance measured, including posting threatening messages about another person that others were able to see.

The existing field has been criticised by Holt et al. (2012) and, more recently, Li et al. (2016) who suggest that little is currently known about how these factors relate within juvenile populations who are both likely to engage in cybercrime and are also more likely to be victims of bullying. To date, much existing research within this area has focused on university-based populations which, although relevant given that this demographic is likely to spend time online, does not allow for exploration of the experiences of young people who are exposed to technology at earlier developmental stages (Holt et al., 2012). However, these results also utilised a context- and age-specific sample, making it difficult to interpret these findings in any other context and failed to include adult participants, leading to a dearth in knowledge about how these processes are affected by age. For knowledge to expand, more representative and diverse samples must be utilised.

Only a handful of studies have explored the potential link between the general theory and social learning theory of cyberdeviance (Li et al., 2016; Marcum, Higgins & Ricketts, 2014; Holt et al., 2012; Holt et al., 2010). The results of Li et al. (2016) suggest certain aspects of social learning, specifically time spent associating with deviant peers, the perception of a lack of rules online and a lack of moral beliefs regarding engaging in cyberdeviant behaviours, as well as low self-control were significant predictors for cyberbullying. Results suggest that aspects of social learning and low self-control were significant predictors individually, which

supports the findings of existing research that has explored each theory in isolation (Holt et al., 2012). However, when the full model was explored, the social learning process was found to partially mediate the relationship between low self-control and cyberbullying. Thus, Li et al. (2016) suggest that individuals with lower self-control are more likely to seek out peers who engage in deviant behaviour and these relationships then impact on individual selfcontrol through normalisation of cyberviolence, which increases the likelihood of offending. Li et al. (2016) posit that, rather than focusing on time spent online as a key risk factor, further research should explore peer relationships and individual attitudes towards negative online behaviours. An issue with this study, as with much existing research into cyberviolence, is the use of a sample that consists entirely of school age children, from one specific cultural context, in this case Kentucky. Two of Akers' factors were also excluded from their analysis, so the model cannot account for the impact of imitation and differential reinforcement on engagement in cyberbullying. The same methodological issues are found in the research conducted by Holt et al. (2012), making this small area of research difficult to generalise to wider populations, demonstrating an obvious need for further research to extricate the relationship between the interaction and influence of peers and low self-control online (Holt et al., 2012). Marcum et al. (2014) also utilised a general-social learning theoretical approach to explore cyberstalking within a sample of school children. The results lend support to the link between lower levels of self-control and cyberviolence, with cyberstalking increasing as self-control decreased, as well as finding a link between association with deviant peers and cyberstalking. Whilst this study shares the same methodological issues as Li et al. (2016) and Holt et al. (2012), in that a cross-sectional sample of youths were utilised, Marcum et al. (2014) argue that this type of sampling is recommended by both Akers and Gottfredson and Hirschi (1990) in order to examine the utility of these theories within particular populations. Holt et al. (2012) have also suggested

that online harassment as a form of cyberviolence is a common phenomenon within juvenile populations, lending credence to the need for exploration of the experiences of this demographic.

A further issue with existing research is that it has not been applied to engagement with social networking sites, an area of Internet use which has grown significantly in recent years. For understanding to move forward, research must move away from piracy and hacking behaviours and explore negative behaviours within wider online contexts. More attention on adult samples is also necessary, rather than an over-reliance on youth sampling. Whilst attitudes towards crime and also certain personality traits can be seen as fixed by the time an individual reaches adulthood, the social media paroxysm has led to a new means of communication, one in which individuals can behave in ways that may be wholly dissimilar to their offline persona. Whilst this should not suggest that social media can create negative attitudes it does provide an outlet for behaviours that are unpalatable offline, as discussed by Shaw (2014).

Personality Within the Online Space

As social learning theory has suggested, the cultural mores set out in online spaces can condone and even justify negative online behaviour. However, despite widespread public debate about the prevalence of such contact, the fact remains that not all users behave negatively, even when they exist within the same online spaces as peers who do engage in negative behaviour. Whilst feminist theorists may argue that this is due to the extension of offline gender inequality, and indeed given the extensive prevalence of gender-based cyberviolence discussed within feminist research, it appears remiss to assume that gender is not a factor in a number of negative interactions; there must be other factors that contribute to engagement in cyberviolence. Low self-control is also the focus of the General Theory of

Crime and so highlights the significance of personal characteristics as a motivating factor within criminality, albeit as a result of socialisation processes rather than heritable traits. This leads to the need to explore the individual who exists within the general cyberculture. In order to do so, theorists have turned to personality as a means of explaining the drive to engage in negative online behaviour.

Historical Perspectives on Personality.

Personality is defined as a psychological construct capable of explaining the gamut of human behaviour using several measurable, consistent individual characteristics that influence significant aspects of one's life, including mental and physical health. As a result, it has remained an important area within psychological research (Xue, Hong, Guo, Gao, Wu, Zheng & Zhao, 2017). Existing research into personality can be broadly classified according to four main areas i) psychoanalytic, ii) humanistic, iii) trait and, iv) social-cognitive. Psychoanalytic approaches have had a controversial history, with many early theorists like Freud being widely discredited, although it continues to be posited as a means of exploring personality (Bornstein, 2010). Humanistic approaches such as Maslow's (1943) hierarchy of needs, are still used today to explore various aspects of daily life, including social networking (Cao, Jiang, Oh, Li, Liao & Chen, 2013). Similarly, trait theories, including the so-called Big Five theory (Goldberg, 1990), continue to receive empirical attention and have been applied to social media use (Hollenbaugh & Ferris, 2014).

Given the significance of personality on decision making across a variety of areas, it is understandable that scholarly focus would shift to the impact of personality on deviance. This has interesting ramifications, not only for individual level offending but also in deviant peer group formation, as discussed in Gottfredson and Hirschi's (1990) theory, as those with similar personality traits gravitate together (Jones, Miller & Lynam, 2011). However, it is

important to consider the particular role of deviance in such groups. Online communities may share little in regard to personality traits but may be joined together by certain predilections that are unpalatable to wider audiences (e.g. racist views, paedophilic interests), which leads to a need to seek out others who share them.

Despite the apparent significance of personality on individual behaviour, the personality model fell out of favour, arguably because of criminologists' political concerns (Andrews & Bonta, 2010). These concerns led to an emphasis being placed on factors that fed into political ideologies, including social class and poverty, despite difficulties linking these factors at an individual level (O'Riordan & O'Connell, 2014). Gottfredson and Hirschi's (1990) general theory of crime argued that self-control should not be considered a personality trait (Jones, et al., 2011). Whilst attention has been paid to the role of personality in 'traditional' forms of offending, with limited success, criminality has experienced a seismic shift since the inception of the Internet with interpersonal and financial crime now occurring in virtual contexts. As a result, a wealth of research opportunities has opened up, bringing with them a range of issues.

Personality and Cyberviolence.

The growing popularity of social media has provided a wholly different platform for victimisation and given offenders access to a wide range of potential targets, which has provided a new avenue for scholarly exploration. When exploring the personality of Internet users, researchers have focused on so-called negative traits and their impact, from the 'dark triad' (Goodboy & Martin, 2015) to sadism (Craker & March, 2016). These studies seem to suggest that the Internet, particularly social media platforms, are a veritable playground for those with higher levels of such traits, providing a wealth of opportunity for displays of cruelty. It must be emphasised that the measures used have, in the majority, been validated in

offline contexts, which can lead to questions about their applicability to cyberviolence. A similar critique is also the focus on specific traits, often in isolation, which can lead to a stilted view of the factors that impact on engagement in cyberviolence, as opposed to a more holistic view of personality.

Although research exists which has explored the individual traits and characteristics related to cyberviolence, these studies can only offer snapshots of individual users. The driving force behind engagement in such behaviour is undoubtedly complex and may vary between interactions, depending on the individual's circumstances. This is not to suggest that there is no merit to exploring the potential personality factors that may be associated with cyberviolence, but should stress a note of caution. As well as the reliance on participant honesty and disclosure, studies are also reliant, depending on the scope of their research, on the current attitudes and traits of the individual. It is possible that personality is affected by engagement with online spaces, as they are removed from typical day-to-day interactions. Although this gap is closing steadily, with more and more social networking and daily tasks taking place online, these two realms remain distinct. This may lead to disparity between how the person views themselves online and offline. Whilst studies have contrasted online and offline violence, such as cyberbullying versus traditional bullying, there is a lack of research that explores how individuals conceptualise their online and offline personalities and whether they see these as divergent.

Conclusion

As this review demonstrates, it would be lax to assume that one school of thought could adequately explain cyberviolence. However, each area provides potential scope for analysis which can be synthesised to identify key motivators and drivers behind engagement in negative online behaviours and also to conceptualise the experience of being targeted online.

It is also clear to see the overlap between these theoretical concepts, with each area complimenting the next. The results of Li et al. (2016) support those of Jane (2017; 2016; 2015; 2014), by lending support to the significance of peer networks in engagement in cyberviolence. Similarly, Akers' imitation concept also relates to feminist theory, in that those who observe behaviour are more likely to engage in similar acts, particularly if this behaviour is normalised by peers. Holt et al. (2010) also discuss the sexist and misogynistic exchanges on hacker websites and forums and suggest that micro-level structures like gender have an impact on participation in cybercrime, lending support to Jane's view that technology and online spaces are male-focused. Obviously, the individual can never be removed from their social context, no individual exists in isolation from their wider socio-cultural environment and so each theoretical area has useful conceptualisations which can be combined to explain cyberviolence. This work has already begun for some researchers, as evidenced by those who have combined social learning theory and GCT to create a hybrid that explores both individual and social factors. As feminist theory suggests, the wider environment in which such individual behaviour takes place has an impact on both the behaviour of sender and recipient. The public or quasi-public nature of these interactions must impact on the perception of them, from a performative aspect for perpetrators and a violation aspect for victims. The pool of prospective victims must also be explored as a potential motivator for offenders who can target people with impunity and can carry out attacks concurrently. This leads to a clear need for integration of theoretical frameworks that explore factors not only at an individual but also a societal level. Exploration of the theories cited here reveals that feminist theory is one of the only areas to denote a significant amount of intellectual consideration to cyberviolence. This demarcates feminist theory from other schools of thought who have yet to fully explore this new phenomenon in any great detail.

Whilst feminist theory is not without flaw in its approach to cyberviolence, it does provide the most useful theoretical underpinning for this thesis.

Considerable debate exists across criminology and psychology disciplines with regard to the role of personality versus socio-cultural factors. This is particularly true when considering the disparity between views of self-control within the general theory of crime. Hirschi (2004) argues that self-control should not be conceived as an element of personality. However, Jones et al. (2011) suggest the opposite, arguing that many of the elements of this theory (e.g. impulsivity and interpersonal insensitivity) are included in models of personality, such as the five-factor model. Given the clouded field in which current research lies, it is clear that there is much work to do to apply these theories to online contexts in a meaningful way.

Theorists have linked certain personality traits with engagement in negative online behaviour as well as highlighting particular traits which may relate to online victimisation. As a result, a growing body of research exists that captures these traits in relation to cyberviolence and seeks to develop understanding of our online personalities.

3. Social Media Personalities

Although exploration of cyberviolence is in its relative infancy, preliminary results suggest individual characteristics may impact on engagement in cyberviolence. This is particularly true of traits that can be linked to social interaction and relationships, such as empathy. Personality, the 'psychological organisation' responsible for our response to stimuli, is unique to each of us and influences the way we conceptualise the world around us and how we react to it (Barceló, 2017). Social sciences have paid significant attention to personality traits because they are endogenic and remain relatively stable across the lifespan (Anusic & Schimmack, 2016) and they can also impact on individual preferences (Gerber, Huber, Doherty & Dowling, 2011).

The central tenet of this thesis is that distinctions will exist in relation to personality characteristics for those involved in cyberviolence and those not. For clarity, these traits have been separated into intra- and interpersonal traits. Intrapersonal refers to traits which are related to one's relationship with oneself (e.g. self-esteem) and interpersonal refers to traits which are related to how one relates to others (e.g. Machiavellianism). However, in as much as our individuality cannot be separated from our socio-cultural context, our view of ourselves and our interaction with others can never be entirely distinct and so in-tandem exploration of the traits that impact these key relationships can offer a more holistic view of our online engagement. Whilst these traits have been delineated according to their conceptualisation as intra-or interpersonal, it is accepted that it is not a dichotomous split. There will be overlaps between the traits discussed below, in that traits which are presented as intrapersonal may also impact on interpersonal exchanges, and vice-versa; however this demarcation serves to organise key personality factors according to a meaningful construction for the purpose of their discussion in relation to cyberviolence.

Interpersonal traits

With the growth of online engagement, our means of meeting and relating to one another have greatly expanded. We can now meet and form relationships with people across the globe, people we may never meet in person but who can have a significant impact on our daily lives. We are also capable of having an impact on the lives of others and take our offline means of relating to each other online. It is thus important to develop an understanding of how our ways of interacting are shifting and developing in line with technological advancements.

Empathy.

One of the most widely researched personality traits is empathy, which is defined as an affective response to the emotional state of another, whether that target's perceived emotional state is real or conceived by the recipient. Empathy is a complex process, which includes automatic responses that lead to resonance with others' emotional experiences, alongside cognitive processes that control identification (Grühn, Rebucal, Diehl, Lumley and Labouvie-Vief, 2008). The duality of empathy is described in the action-perception model (Preston & de Waal, 2002), which suggests the perception of another's emotional state is enough to trigger an instinctive representation of this state within one's self. This spontaneous representation leads to an 'emotional contagion' accompanied by automatic responses (Ugazio, Majdandžić & Lamm, 2014; Grühn et al., 2008). This process results in cognitive and emotive resonance with the target in a manner that is isomorphic. The emotionality and automaticity of this process are mediated by a number of factors including lived experience, cognitive ability, age and ability to regulate (Grühn et al., 2008). The significance of capacity for distinction between self/other is central to empathy as this represents the ability to distinguish between one's own representations and those of others (Singer & Lamm, 2009).

Thus, empathy can be defined as a method of creating a 'copy' of another's emotional state, whilst remaining aware of which parts are copied from the target and which parts are authentically felt by the individual (Ugazio et al.,2014). Empathy can also be described as the act of comforting others (Caplan & Turner, 2007).

As with other personality traits, empathy develops during childhood and into adolescence⁶. Empathy may also be displayed towards entire groups (e.g. those in poverty) and so is able to transcend the immediate experience (Shih, Stotzer, & Gutiérrez, 2013). As Grühn et al. (2008) posit, whilst much attention has been paid to empathic development in children, less focus has been afforded to the potential changes in empathy across the lifespan. To combat this, Grühn et al., (2008) explored empathy across their cohort over a twelve-year span and concluded that there was no longitudinal evidence for empathy decline, although younger participants displayed greater empathy than older adults. This was supported by O'Brien, Konrath, Grühn, and Hagen (2013) who reported an inverted 'U-shaped curve' in empathy across their sample, with middle-aged adults reporting greater empathy than adolescents or older adults, suggesting an increase followed by a decline over time. This leads to the conclusion that this is a matter of individual differences, as both Grühn et al. (2008) and O'Brien et al. (2013) acknowledge, and differences found in empathy may relate to the cohorts utilised, rather than an intrinsic result of empathy declining as we age. One issue is that, with the exception of the work of Grühn et al. (2008) no research has explored empathy across lifespan with the same cohort of participants making it difficult to identify how empathy develops after the adolescent phase described by Hoffman (2002).

⁶ Hoffman (2002) defines this as a four-stage process, (1) global empathy occurs in the first year when infants match witnessed emotions, such as crying when another child cries, in an involuntary manner, (2) egocentric empathy, which occurs from age 2, wherein children actively offer help, however this help is egocentrically led by what they find comforting, (3) role-taking, which suggests the child has become aware that others may feel differently. This leads to responses to distress becoming tailored to the other person's needs rather than their own, (4) in early adolescence individuals become aware that other's feelings may not stem only from the immediate situation but also their wider life situation.

Cultural practices also play a role in socialisation and empathy plays a central role in the formation and maintenance of interpersonal bonding (Chopik, O'Brien & Konrath, 2017). Research exploring empathy has often been limited to North America and studies that have attempted to explore the relationship between culture and empathy are rare and inconsistent. Some theorists suggest collectivist cultures are positively associated with empathy, and some suggest the opposite (Chopik et al., 2017). In order to address these inconsistencies, Chopik et al. (2017) explored empathy within a sample spanning sixty three countries, concluding that countries with higher levels of empathy also displayed greater collectivism, self-esteem, agreeableness, life satisfaction and pro-social behaviour. However, the majority of the sample utilised were based within North America. In order to highlight the effect of culture on individual levels of empathy, further research is needed to confirm these findings with more representative samples.

Empathy: A Two Factor Construct.

Empathy has a number of inter- and intrapersonal benefits including life satisfaction and increased altruism (Chopik, et al., 2017), however, as with other personality traits, it can be difficult to conceptualise. Popular opinion bisects empathy into affective and cognitive components, which builds on the notion of automatic resonance being controlled by cognitive processes, defined within the action-perception model. This results in empathic responses being regulated by a combination of thoughts and feelings (Grühn et al., 2008). Affective empathy relates to these emotional aspects and the concept of being affected by another's emotional state. Cognitive empathy refers to the ability to take the perspective of another. Empathy is thus a means of relating to others around us in a way that requires relative emotional depth when compared to other emotive states, such as anger or happiness, which can manifest regardless of external sources of behaviour or emotion. This gives empathy a

particular resonance within the context of relationships, as the ability to take the perspective of another and to feel a sense of what they are feeling provides closeness and a sense of understanding. Concordant empathy refers to the ability to recognise these (affective) cues from another individual and take their perspective (cognitive), thus being able to respond appropriately (affective), which leads to an empathic response (Kirsch, & Becker, 2007). Due to the range of factors affecting empathic responses, individual empathy can vary greatly. As Grühn et al. (2008) highlight, our ability to regulate emotions impacts on our ability to empathise with others, those with good regulation skills are more able to transform their response into an appropriate empathic outcome (e.g. consolation or comfort). Conversely, those with poorer regulation skills are more likely to experience a negative response in the face of others' negative emotional states and can react with avoidance or even aggression.

Empathy Online.

Given that empathy can be conceived as a significant contributing factor to successful relationships, it is important to explore the diversity of those relationships. This is particularly true of online social interaction. Social networking has increased steadily alongside technological development and widespread Internet access. This has led to the creation of new opportunities for connection and social contact. However, the cybersphere must, by its very nature, function in a distinctly different way to offline interactions with key elements of asynchronicity, lack of visual cues and relative anonymity online, contributing to a new form of relationship-building and maintenance.

It is clearly possible to express empathy online, as demonstrated by Carrier, Spradlin, Bunce and Rosen (2015) who highlight the ways in which peers can express support and condolence via Facebook. Caplan and Turner (2007) have also suggested that computer-mediated communication may serve to facilitate empathy by allowing easy and frequent access to

peers. These findings are supported by Vossen and Valkenburg (2017) who have suggested that access to social media increases adolescent empathy over time. Whilst it is useful to have longitudinal data, this sample is drawn from a narrow cross section of users (i.e. those aged 10-14) over a relatively short period. Given that empathy continues to develop across the lifespan, it seems remiss to seek out the empathic development of such a narrow age group. The fact that this research was also recently conducted also causes difficulty as these participants can be seen as wholly of the 'Net Generation', defined by Carrier et al. (2015) as a specific age range of individuals who have grown up in the technological age where everything is computerised. This is reductive when exploring the demographics of social media users, as those aged 30 and above have increased steadily year on year (Pew Research Center, 2018). In order to fully explore the impact of social media on empathy, it is important to explore this trait in a wider range of social media users.

However, whilst it can be argued that relationships formed purely in cyberspace are just as significant, affirming and supportive as offline relationships, there are still many barriers to communication that may impact on one's ability to empathise with another. As Konrath (2013, cited in Carrier et al., 2015) noted during a review of personality traits during the 'Internet era', there has been a decline in certain characteristics, including empathy. This is attributed to the rise of superficial interactions and increased time spent online, with this superficiality thought to reduce users' capacity for empathy due to a lack of face-to-face interaction (Carrier et al., 2015).

The potential impact of the virtual environment on empathy has been explored in a number of studies including the work of Ang, Li and Seah (2017) who found a significant negative relationship between empathy and cyberbullying within a sample of adolescents, particularly for affective empathy. An interesting finding comes from Pettalia et al., (2013) who explored

empathy in those defined as 'cyberbully-victims'—those who have reported being victimised and have also perpetrated cyberviolence. Such individuals were found to score higher for cognitive empathy, along with 'pure' cybervictims, than young people who were not involved. Cyberbully-victims were also found to score significantly higher on affective empathy than cyberbullies and those not involved. Lazuras et al., (2013) also explored hybrid experiences of cyberviolence and noted that cyberbully-victims and cybervictims scored significantly higher on cognitive empathy, and cyberbully-victims demonstrate greater affective empathy. These results suggest that hybrid cases of cyberviolence are particularly interesting, in relation to empathy, and have yet to be explored in any detail, Lazuras et al (2013) suggest that this sub-group represents a confounding group who are able to understand the perspective of others and identify with the emotions they feel but still engage in acts of cyberviolence. There are two possible implications for such findings; one is that victims of cyberviolence are able to mask their own empathic response to perpetrate similar behaviour, perhaps to 'fit in' with their peers who may be engaging in acts of cyberviolence. The other possibility is that those who identify as cybervictims and perpetrators do display empathy but may also demonstrate greater levels of dark traits like sadism. Baumeister and Lobbestael (2011) consider such dark traits a 'perversion of empathy', suggesting that those who are sadistic can recognise others' emotional reactions but rather than responding with compassion, they take enjoyment from their target's suffering. One limitation of the existing research which has identified hybrid cases of cybervictimisation/perpetration is that the behaviours explored have been classified according to the rigid definitions outlined in chapter 1. This leads to a lack of understanding about how empathy may relate to cyberviolence as defined in this thesis and so further exploration is necessary to identify if hybrid cases of cyberviolence exist and if the findings of Lazuras et al (2013) and Pettalia et al (2013) can be replicated.

Alongside research that has explored the role of empathy in online interactions, the impact of engagement with media, which may reduce empathy, has also been examined. Gabbiadini, Riva, Andrighetto, Volpato and Bushman (2016) discuss the role of objectification in popular titles such as Grand Theft Auto, which depicts female characters as sexual objects. As noted by Gabbiadini et al. (2016), we feel empathy for people and not for objects, therefore frequent exposure to this message can affect the empathic response towards women. Results of this study suggested that male participants, particularly those who strongly identified with their avatar in the game, showed decreased empathy for female victims of violence after being exposed to a violent-sexist video game, findings that were not replicated for female participants or those exposed to violent-only games. Whilst these findings are interesting, there is a lack of corroborating research, although this does fit with wider concerns from feminist researchers about the impact of virtual perceptions of women (see Jane, 2017; 2016; 2015; 2014). A further issue with this view is that the development of video games, as with any media, is driven by demand and cannot exist in a cultural vacuum. This leads to an inevitable question about the apparently cyclic nature of sexism online, with developers creating games they think will appeal and individuals, often from a young age, being exposed to these attitudes.

Empathy and Cyberviolence.

One limitation with existing research into the role of empathy within cyberviolence is the reliance on juvenile and student samples. No study currently exists that explores the potential role of empathy in engagement in cyberviolence within a representative sample of social media users. Also, whilst research exists that has drawn from populations across the world, limited research exists which draws on a multicultural sample. Research has routinely identified a link between lowered empathy and cyberbullying perpetration (Ang & Goh,

2010), however, fewer studies exist that explore the link between empathy and cybervictimisation (Brewer & Kerslake, 2015). Some research suggests that those who report cybervictimisation also report increased levels of empathy, which may result in increased sensitivity to perceived cyberviolence (Kokkinos, Antoniadou & Markos, 2014). Conversely, Schultze-Krumbholz and Scheithauer (2009) suggest that those involved in cyberviolence report lower empathy than those not involved, whether perpetrators or victims, as do Brewer and Kerslake (2015) who suggest that empathy is linked to engagement in cyberviolence, with perpetrators reporting lower levels of empathy.

Alongside empathy, other traits exist that are also thought to be intrinsic to our interpersonal relationships. The so-called Big Five traits of personality⁷, which include extraversion and agreeableness, link to interpersonal relationships, but are also thought to represent the core of personality offline and are thus important to explore within online contexts (Wilt & Revelle, 2009).

Defining Extraversion.

Extraversion has been a trait of interest since Hippocrates first outlined the four key temperaments (Wilt & Revelle, 2009) and was eventually conceptualised in the form used today by Eysenck (1952) by way of Jung (1921) who posited a dichotomy between extraversion and introversion, rather than the continuum approach favoured today. Those who are high in extraversion, often referred to as extroverts, are assertive, outgoing individuals who relate to those around them with ease. Defined as moderately heritable and

⁷ The 'Big Five' personality traits are Agreeableness, Conscientiousness, Extraversion, Neuroticism and Openness to Experience. These five broad dimensions are thought to capture the human personality, and each contain sublevel traits, for instance extraversion can include gregariousness, warmth and excitement seeking (Goldberg, 1993).

consistent across cultures, extraversion is defined as a basic human characteristic (Smillie, 2013).

Extraversion Online.

Extroverts are thought to present their authentic self online and use social media as a tool for maintaining and expanding their social network, essentially using their online life as an extension of their offline life (Tosun & Lajunen, 2010). This is supported by Michikyan, Subrahmanyam & Dennis, (2014) who found extraverted young adults were more active users of Facebook. Extraversion is also linked to increased sociability online, from greater numbers of Facebook friends (Garcia & Silkström, 2013) to preference for interactive challenges in online gaming tasks that require cooperation (Worth & Book, 2014).

Extraversion and Cyberviolence.

Given that extraversion has been linked to being a 'people person' and enjoying the company of others, it may seem at odds with the behaviours attributed to cyberviolence, which are focused on disrupting such relationships. However, research exploring extraversion and cyberviolence, although sparse, has found a link with Festl and Quandt (2013) suggesting cyberbullying is linked to higher scores on measures of extraversion, although these results have been contested (van Geel, Goemans, Toprak and Vedder, 2017).

Defining Agreeableness.

Alongside extraversion, agreeableness is seen as a core element of personality and has been linked to empathy (Chopik et al., 2017). Agreeableness refers to a propensity for being forgiving and tolerant (van Geel et al., 2017) as well as exhibiting prosocial motivation and helping behaviour, which leads to successful conflict resolution (Ivcevic & Ambady, 2013). It also refers to an individual's tendency to cooperate, trust others and display concern for

another's well-being (Barceló, 2017). Whilst these can be seen as positive traits, it is also possible for people who are high on agreeableness to have a distaste for disagreement and aim to avoid conflict (Barceló, 2017).

Agreeableness Online.

Within online contexts, people may display more agreeable traits, as noted by Ivcevic and Ambady (2013) who support Muscanell and Guadagno's (2011) findings that women who report lower agreeableness offline report greater engagement with social networking features on Facebook, such as instant messaging. In terms of online gaming, Worth and Book (2014) have suggested that those who score highly on measures of this trait prefer to play as avatars with helpful professions and avoid avatars with violent professions, such as hitmen (Park & Henley, 2007). In gaming contexts, those higher in agreeableness engage in more friendly, prosocial online communication, compared to those who score lower on measures of agreeableness who are more likely to kill other players (Worth & Book, 2014).

Agreeableness and Cyberviolence.

As with extraversion, studies exploring the role of agreeableness in cyberviolence are limited. Existing research has suggested that lower agreeableness is related to cyberbullying (van Geel et al., 2017; Zezulka and Seigfried-Spellar, 2016), with Kokkinos et al., (2016) finding a link between low agreeableness and Facebook bullying in male participants. However, given the lack of research in this area, it is difficult to confirm or refute these findings, and more research is required, particularly with representative populations.

It is clear to see that empathy has been widely explored in relation to cyberviolence and findings have consistently reported a link between lower levels of positive traits and engagement in cyberviolence; research into other traits, such as agreeableness, is limited.

However, negative interpersonal traits can also impact on our online interactions and higher levels of such traits can be implicated in engagement in negative online behaviour. In offline contexts, 'dark' traits⁸ have been linked to negative behaviours such as manipulation, aggression and sadism. This behaviour may have translated into online contexts, with the outcome being negative online interaction.

Defining Machiavellianism.

One such negative trait is Machiavellianism. The concept of Machiavellianism is derived from the philosopher and Florentine statesman Niccolò Machiavelli who was an advocate for manipulative political behaviour and wrote the influential II Principe in 1532 (Colman, 2015). Defined as manipulative behaviour that seeks to maintain influence over others, Machiavellianism can result in negative behaviours including aggression (Gibb & Devereux, 2014) and is a trait that is characterised by cold calculation and deceit (van Geel et al., 2017). As with other dark traits, including narcissism and psychopathy, Machiavellianism is usually measured at subclinical levels within the general population (i.e. individuals in non-clinical or non-forensic contexts), although that does not imply that the impact of this trait is any less harmful on both the individual and others who come into contact with them (Gibb and Devereux, 2014). Developing over the life span, Machiavellianism has been linked to negativity and 'feeling in-between', feelings that are theorised to decrease with age as individuals become more secure in their identity, leading to a theorised decline into old age (Barlett, 2016).

Machiavellianism in Online Spaces.

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⁸ Commonly referred to as the Dark Triad, these traits are narcissism, Machiavellianism and psychopathy which are thought to be interrelated but distinct and share a common undercurrent of malevolence (Paulhus & Williams, 2002).

The dominant feature of social networking sites is the presentation of the self. There are many ways in which this presentation can be manipulated from the use of technological advancements to alter others' perceptions (e.g. photo filters) to dishonesty about material shared. Another feature of social networking sites are the creation and maintenance of relationships, but opportunities are also afforded for those who may wish to artificially manipulate those relationships. As a result of this prospect for personal and relational falsification, those who report greater scores on measures of Machiavellianism can thrive in online settings, given their propensity for emotional detachment and ability to exploit others. They are able to demonstrate strategy and protective self-monitoring online, including utilising a range of techniques such as projecting intimacy, or conversely, shame and embarrassment onto others; they are also able to target online friendships, which are easier to manipulate and limit the profundity of personal information shared (Abell & Brewer, 2014). The role of Machiavellianism has been explored in relation to online innovation (Hutter, Füller, Hautz, Bilgram, & Matzler, 2015) and gender differences in Facebook use (Abell & Brewer, 2014). According to Abell and Brewer (2014), men who demonstrate Machiavellian qualities are more likely to utilise Facebook to engage in self-promotion, whereas women more frequently demonstrate dishonesty in their self-promotion and behave in relationally aggressive ways with online friends. Both men and women were more likely to engage in greater self-monitoring than those who reported lower Machiavellianism scores. This is one of the few studies to explore this trait in Internet users and whilst it relies on self-report data from a Western sample, it represents progression in understanding of how Machiavellianism impacts on engagement with social media platforms. However, these findings are refuted by Fox and Rooney (2015) who found no association between Machiavellianism and social networking site usage. This is thought to be due to the visibility of much of the communication on social media, which may be at odds with the emphasis on control and

manipulation of relationships intrinsic to this trait. In terms of self-presentation Sumner, Byers, Boochever and Park (2012) report that those who score highly on measures of Machiavellianism are more likely to swear and used angry terminology in Twitter interactions. Bogolyubova et al., (2018) also report distinctive lexical features online, with Machiavellianism being negatively correlated with communication and relationship issues, mental processes and spirituality.

Machiavellianism and Cyberviolence.

Machiavellianism is defined by a desire to manipulate and control others. In cyber contexts, this can take the form of threatening behaviour, from threats of offline or online harm (i.e. sharing harmful information etc.), designed to solidify one's place within one's social network to the manipulation of interactions with peers. However, research exploring the link between Machiavellianism and cyberviolence has shown mixed results. Craker and March (2016) report no link between trolling on Facebook and this trait, suggesting that the conversational, fast paced and frequently public environment of Facebook may not be conducive to the calculated, strategic restraint demonstrated by those with high levels of Machiavellianism.

Manipulation and attempts to control others, whilst extensively explored offline, have not been found to be as productive in online contexts. Whilst results have been mixed, the recent case of Matthew Falder (Davies, 2017) has highlighted the opportunities for manipulative sadistic individuals to utilise online spaces to target and abuse their victims. Whilst Machiavellianism alone is unlikely to account for such behaviour, it does provide an interesting area of exploration. When explored in tandem with the other dark traits which make up this triad (i.e. psychopathy and narcissism) it may be possible to identify the impact

of such traits in online interaction and to develop knowledge about how these traits are mutating within online contexts.

Defining Psychopathy.

Psychopathy is frequently linked to Machiavellianism, although they are distinct constructs (Paulhus & Williams, 2002). References to psychopathy can be found in medieval, biblical and classical texts and it is thought to be one of the oldest personality disorders in existence, although systematic exploration of the construct has only begun in the last three decades (Wilson, Abramowitz, Vasilev, Bozgunov & Vassileva, 2014). Psychopathy is defined by shallow affect and a lack of empathy and guilt (McCrory, E., & Seara-Cardoso, 2014), coupled with thrill seeking and high impulsivity. It consists of behavioural, affective and interpersonal features, including manipulation, irresponsibility and a lack of remorse and anxiety, and is associated with negative outcomes (Issa, Falkenbach, Trupp, Campregher, & Lap, 2017). In normal (i.e. subclinical) populations, psychopathy is thought to consist of four key components: interpersonal manipulation, erratic lifestyle, callous affect and criminal tendencies (Neal & Sellbom, 2012).

Whilst it is inappropriate to diagnose psychopathy in childhood, it is possible to identify callous-unemotional traits which are indicative of psychopathy from early childhood, which can be predictive of future antisocial behaviour (McCrory & Seara-Cardoso, 2014). Vachon, Lynam, Widiger, Miller, McCrae & Costa (2013) explored psychopathy across the lifespan, suggesting that psychopathy decreases with age. This study used two connected cohorts—an adult and adolescent sample—so this decline may be attributed to cohort differences, rather than developmental trends. However, the decline in socially aversive traits has been noted by other researchers (Foster, Campbell & Twenge, 2003) and so it is possible that psychopathy symptoms, in non-clinical populations, may decrease as we age.

Whilst the majority of research into psychopathy has centred on Western samples, particularly North American and European participants, research by Wilson et al. (2014) centres on the potential distinctions between cultures in terms of average score on the Psychopathy Checklist: Screening Version (PCL:SV) developed by Hart, Cox and Hare (1995). Results suggest certain elements including grandiosity and superficial affect were not as salient within other cultural contexts, which Hart et al. (1995) attribute to cultural bias. The sample used for this research were predominantly substance users in their twenties, which highlights the need to explore subclinical psychopathy in more generalisable samples. Issa et al. (2017) sought to do this with a sample of Lebanese college students, reporting greater psychopathy in the Lebanese cohort relative to the American cohort for psychopathy generally, and for cold-heartedness specifically. No gender differences were noted in the Lebanese sample for psychopathy generally, with the exception of the cold-heartedness subscale. This is thought to be attributable to the considerable trauma experienced by Lebanon as a nation which Issa et al. (2017) suggest may have resulted in a cultural emotional numbing and increased aggression. This research is significant as it is one of few to explore potential gender differences in psychopathy as well as providing a context-driven explanation for differences in scores. Most research has focused on male samples, which can lead to concerns about the applicability of measures to female participants. Existing crossgender studies have reported mixed results, with some studies reporting differences in scores on psychopathy measures, some reporting no distinction (Issa et al., 2017) and research by Falkenbach, Barese, Balash, Reinhard and Hughs (2015) reporting higher scores for women. These conflicting findings emphasise the complexity of psychopathy and the need for continued study in varied populations. The most current conceptualisation of psychopathy is the triarchic model formulated following analysis of recurring themes within historical and contemporary discussions of the construct (Drislane, Brislin, Jones & Patrick, 2017). This

conceptualisation splits psychopathy and its associated traits into three broad categories: boldness (e.g. assertiveness, social dominance), meanness (e.g. empathy deficit, callous aggression) and disinhibition (e.g. antisocial behaviour, impulsivity).

Psychopathy in Online Spaces.

Although psychopathy has been explored extensively in offline contexts, little research exists that has explored the impact of this trait on online behaviour. Whilst psychopathy is often perceived as inherently negative, researchers have chosen to explore its effect on online behaviours that are not, in essence, harmful. Fox and Rooney (2015) found that psychopathy predicted selfie-taking, but not editing of those images and also a lack of filter on Facebook content in male participants. This is thought to be attributable to the intrinsic impulsiveness linked to psychopathy, meaning individuals do not take the same precautions as others when sharing material. However, Fox and Rooney (2015) have argued that males who present themselves as more 'reckless and impulsive' may be more attractive and so this may serve as a successful dating strategy highlighting that, although this trait is often perceived as inherently negative, psychopathy may have some beneficial implications.

Psychopathy and Cyberviolence.

As noted, the role of psychopathy online has received limited attention particularly in relation to cyberviolence, however researchers who have explored this suggest the aggressive nature of psychopathy can lead to a willingness to engage in acts of cyberviolence (Gibb and Devereux, 2014). Research by Gibb and Devereux (2014) posits that individuals who reported higher levels of psychopathy were more likely to engage in cyberbullying behaviour, a finding echoed by Goodboy and Martin (2015) who suggest psychopathy is a unique predictor of both narcissism and Machiavellianism as part of the dark triad of behaviours and

also plays a role in cyberbullying behaviour, which, they surmise, demarcates psychopathy as particularly problematic within this triumvirate. Although both studies were limited in scope, choosing to focus only on student experiences and limited forms of engagement with social media profiles, results do support findings from other researchers who have identified the significance of psychopathy in cyberviolence, such as Pabian, De Backer and Vandebosch (2015), who also found a relationship between cyberaggression and psychopathy. Research by Craker and March (2016) has also linked psychopathy to Facebook trolling, suggesting that those who engage in this type of negative online behaviour display a lack of empathy, are indifferent to the distress caused by their behaviour and are driven by 'predatory impulses'. Psychopathy is also related to the use of swear words and words that relate to anger on Twitter (Sumner et al., 2012), further emphasising the impulsivity and propensity for aggression demonstrated offline within online contexts.

Defining Fear of Negative Evaluation.

Whilst some interpersonal traits can be demarcated clearly by their effect on others, such as psychopathy (although that should not suggest that the individual faces no consequences for their behaviour), fear of negative evaluation (FNE) demonstrates a duality between the interpersonal and the personal, with those who score highly perceiving themselves as somehow problematic and fearing that others will disapprove of them because of it. FNE defines social anxiety according to Button, Kounali, Stapinski, Rapee, Lewis and Munafo (2015). It is also thought to exist within the spectrum of perfectionism, with perfectionists fearing disapproval from others (Shafique, Gul & Raseed, 2017) and is thought to be an important factor in understanding interpersonal behaviour (Van den Eijnden, Vermulst, Rooij, Scholte & Mheen, 2014). Resulting in nervousness and worry about being negatively judged by others, FNE is linked to the development of anxiety (Carleton, McCreary, Norton

& Asmundson, 2006), burnout (Hill, Hall, Appleton & Murray, 2010) and can result in maladaptive perfectionism in which the individual perceives that they are unacceptable if less than perfect (Shafique et al., 2017). FNE has been positively correlated with stress, however, this risk was mediated by being an 'adaptive' rather than 'maladaptive' perfectionist, suggesting that maladaptive strategies towards seeking perfection may lead to an excessive focus on FNE (Shafique et al., 2017). Research by Button et al. (2015) links FNE to social-evaluative information processing, particularly the processing of information related to the self and suggests that those who score higher for FNE are more likely to perceive themselves negatively and thus refer to themselves in negative terms.

Fear of negative Evaluation Online.

Those who fear negative evaluation report that computer-mediated communication (CMC) is a double-edged sword. On one hand, CMC allows for greater control over self-presentation, which can mediate some negative thought patterns and fears. However, on the other hand, some researchers suggest that these fears and negative beliefs are reinforced by CMC (Erwin, Turk, Heimberg, Fresco & Hantula, 2004). Given the images of perfect lives social media users often try to present, it is not surprising that the fear of being perceived negatively online has been empirically explored, although the scarcity of such research does suggest that FNE has not received as much empirical attention as may be expected.

Fear of Negative Evaluation and Cyberviolence.

Although research exploring the role of FNE in cyberviolence is minimal and has often utilised samples of young people and adolescents, a link has been found between higher scores on measures of FNE and engagement in negative online behaviour. Navarro, Yubero, Larrañage and Martínez (2012) report a link between FNE and cyberbullying victimisation

within a sample of Spanish schoolchildren, findings supported by Van der Eijnden et al. (2014), who also report a link between FNE and cybervictimisation within a sample of Dutch adolescents. As noted by Heiman and Olenik-Shemesh (2016), adolescents in their sample who endured cyberbullying were more likely to withdraw socially, highlighting the impact of cyberviolence on social interaction for those who score higher on measures of FNE. Whilst it is interesting to note similarities despite cultural differences, there is a clear focus on young people's experiences online which makes it difficult to relate these findings to adult Internet users. Research by Satpathy and Ganth (2015) did utilise an adult sample, although this was limited to those aged 18-25, and noted gender differences within their sample, with women reporting greater fear of negative evaluation than men. However, it is clear that more research is needed to explore this trait in those who use social media, particularly in tandem with other traits, to identify whether fears of being viewed negatively may cause individuals to act in ways that may minimise the perceived risk of experiencing negative evaluation.

We are, as humans, social creatures and so many personality traits relate to our interaction with each other. As a result, much of the research into personality has focused on external relationships. However, we also experience an internal relationship with ourselves and so personality traits, such as self-esteem, must also be considered in analyses of personality. Our interaction with the world around us thus shapes, and is shaped, by the way we perceive ourselves, and so it can also be assumed that engagement with social media can also impact on, and be impacted by, our self-perception.

Intrapersonal traits

The complex collection of experiences that shape personality have been the topic of much debate. It is indisputable that there is still much to learn about personality, particularly our personality in online spaces. Our view of ourselves has increasingly become the focus of

public debate, from body positivity movements to bans placed on advertisements that encourage us to be critical of ourselves. This is particularly true in online spaces where great emphasis has been given to the potentially damaging effects of exposure to materials that can lead to a negative self-image.

Defining Self-Esteem.

The concept of self-esteem is not new; indeed, it is possible to trace this concept back to the 1800s (James, 1892). Its continued study is attributed to the conviction that high self-esteem is conducive to favourable outcomes and low self-esteem is at the heart of personal problems (Stets & Burke, 2014). Self-esteem is defined by Orth and Robins (2014) as an individual's subjective evaluation, as opposed to objective evaluation by others and is described by Rosenberg (1965) as feeling one is 'good enough' and so is distinct from self-aggrandising traits such as narcissism. However, there has been a perceived crossover between the two traits, leading to a common belief in psychology that narcissism represents excessive selfesteem (Brummelman, Thomaes & Sedikides, 2016). This is refuted by Brummelman et al. (2016) who suggest that narcissism differs from self-esteem in terms of "its phenotype, its consequences, its development and its origins" (p. 8). Brummelman et al. (2016) echo a key distinction identified by Rosenberg (1965), that high self-esteemers feel satisfied with themselves but do not feel superior to others. Self-esteem relates to a positive view of the self, and relates to being happy with, and valuing oneself, as well as a desire to establish deep intimacy with others (Campbell, Rudich & Sedikides, 2002) and is linked to lower depression and loneliness and increased happiness and subjective well-being (Brummelman et al., 2016). Developing in childhood, around age seven (Thomaes, Stegge, Bushman, Olthof & Denissen, 2008), self-esteem is a consequence of the ability to make global evaluations and thus to compare oneself to others, and also a result of parental warmth, including affection, fondness

and appreciation, which leads to a feeling of being worthy (Brummelan et al., 2016). Considered to be relatively heritable, studies that have attempted to uncover the inherited nature of self-esteem have faced difficulty due to the retrospective nature of the methodology employed that relies on participants remembering their socialisation accurately (Brummelman et al., 2016). Self-esteem thus follows a trajectory that dips in adolescence and then gradually increases over the life course. This causes issue when considering the emphasis on adolescent populations in research around self-esteem, which has linked low self-esteem to smoking (Saari, Kentala & Mattila, 2015), depression (Steiger, Allemand, Robins & Fend, 2014) and even criminality (Trzesniewski, Donnellan, Moffitt, Robins, Poulton & Caspi, 2006). However, a growing body of research exists that explores selfesteem across the lifespan, with Orth and colleagues standing out as some of the most prolific proponents of research that explores this construct by utilising longitudinal samples (Orth & Robins 2014; Orth, Robins & Widaman, 2012; Orth, Trzesnieski & Robins, 2010). Results from this body of work suggest that, although individual differences exist in the trajectory of self-esteem, most individuals' self-esteem increases from the age of 16 before peaking at approximately 50 and declining in later life. Whilst some studies report a sizeable decrease in old age (Shaw, Liang & Krause, 2010), others suggest this decline is small (Wagner, Lang, Neyer & Wagner, 2014).

As well as developing across the lifespan, gender also plays a role in self-esteem with men reporting higher self-esteem than women, although Orth and Robins (2014) argue that this does not exert a strong influence on the trajectory of self-esteem, with both men and women reporting an increase as they age. Little research has explored the development of self-esteem in transgender or non-binary individuals, instead focusing generally on binary gender constructions. However, research by Durwood, McLaughlin and Olson (2017) suggests that

transgender youth do not differ from matched-control participants on self-worth, although these findings do relate specifically to socially transitioned youth.

Whilst cultural differences also exist in relation to self-esteem, research exploring this has faced sampling and methodological criticism, although findings do suggest a positive increase in self-esteem in American samples and a decrease in China and Japan (Hamamura & Septarini, 2017; Liu & Xin, 2015). This is linked to the significance of self-esteem as necessary for positive outcomes in American culture, coupled with increasing individualism and an emphasis on inward self-reflection (Hamamura & Septarini, 2017), findings that were not replicated in cross-temporal analysis of self-esteem in Australia (Hamamura & Septarini, 2017).

Self-Esteem Online.

Developments in online engagement can be seen to be exacerbating an inward-facing sense of individualism, in a culture that is rapidly developing. Whilst self-esteem may be seen to be increased by social networking online, this can also have negative consequences, including lowered self-control. This, when coupled with a desire to produce a favourable representation for followers, can lead to increased health risks and financial implications (Wilcox & Stephen, 2013), findings that are in direct conflict with those related to offline self-esteem, which is associated with positive social behaviours (Bushman & Baumeister, 1988, cited in Wilcox & Stephen, 2013). Research exploring the possible link between self-esteem and internet interaction has reported mixed results. Valkenburg, Peter and Schouten (2006) found that social networking had an indirect effect on self-esteem, with positive feedback increasing self-esteem and negative contact decreasing self-esteem in Dutch adolescents. Similarly, Vogel, Rose, Robert and Eckles (2014) reported that lower self-esteem was linked to increased Facebook use. Blachnio, Przepiorka, & Rudnicka, (2016) also reported that social

media users with low self-esteem used social media sites to enhance their self-image and self-esteem. Blachino et al (2016) also reported that Facebook addicts had lower self-esteem and life satisfaction. One of the largest studies of social media use which sampled over twenty-five thousand users reported that social media use was linked to low self-esteem (Andreassen, Pallesen, & Griffiths, 2017). Hawi and Samaha (2017) reported a small, negative correlation between social media addiction and self-esteem. However, Zhou and Leung (2012) found no relationship between game addiction and self-esteem in Chinese college students, a finding supported by Mersin and Acilar (2015) who reported no link between Facebook use and self-esteem in Turkish university students. This leads to questions about the global nature of self-esteem and also the role of social media in the lives of individuals within different cultural contexts.

Self-Esteem and Cyberviolence.

As noted previously in Chapter 1, there are a number of behaviours that can be conceptualised as cyberviolence and self-esteem has been explored as a factor in a number of these, including cyberbullying utilising adolescent samples, with research exploring the role of self-esteem and cyberviolence reporting mixed results. Some researchers have suggested lower self-esteem is linked to increased severity of cyberbullying, whilst others have struggled to find a consistent pattern (Patchin & Hinduja, 2010). Brewer and Kerslake (2015) found that self-esteem was a significant predictor of cyberbullying victimisation and perpetration, in that those with low self-esteem were more likely to report some form of cyberbullying interaction, whether as victim or perpetrator. In contrast Brack and Caltabiano (2014) reporting no significant differences between those engaging in cyberbullying, either as bullies or victims or a hybrid, although these groups did report lower than average scores for their age group. These findings echo those of Kowalski and Limber (2013) who found low

self-esteem was prevalent in both bullies and victims when compared to those not involved in cyberviolence. However, these findings could be influenced by numerous factors, including variations in sampling, leading to a need for further research to explore the potential link between self-esteem and cyberviolence (Brewer & Kerslake, 2015). In terms of acceptance of cyberviolence, Wyckoff and Kirkpatrick (2016) explored the relationship between selfesteem and direct and indirect aggression online. They reported that those who are higher in competitive self-esteem, defined in this research as mate value and dominance, were more likely to endorse direct displays of aggression over indirect aggression. In terms of the impact of cybervictimisation on self-esteem, Özdemir (2014) reported a negative association between self-esteem and self-reported cybervictimisation. This is refuted by Williford, Orsi, Depaolis and Isen (2018) who reported no relationship between self-esteem and cybervictimisation. However, it is not possible to determine the true impact of cyberviolence on self-esteem, given that it is not possible to identify whether individuals with lower selfesteem are targeted or whether being targeted leads to decreased self-esteem. One of the few existing longitudinal studies does report a relationship between cyberviolence and selfesteem. Modecki, Barber and Vernon (2013) found that self-esteem decreased as participants continued into adolescence and that a steeper decline in grades 8-10 predicted higher levels of cyberaggression victimisation and perpetration. One limitation of all studies cited here is their reliance on youth samples. Whilst adolescence is a pivotal time when considering selfesteem, it has been noted that there is an apparently natural decline in self-esteem during adolescence, which then increases steadily as one reaches adulthood and continues to develop across the lifespan. This highlights a need for exploration of self-esteem within mixed/adult samples (Brack & Caltabiano, 2014), which includes adults not born during the 'Digital Age', to identify the potential role of self-esteem on social media behaviour and involvement in cyberviolence.

The lack of focus on the impact of cyberviolence on adult self-esteem is unusual, given the rapid advancement in engagement with social media coupled with the trajectory of selfesteem as one ages. Research that has explored self-esteem within this context has chosen to focus on relatively niche behaviours such as sexting, as explored by Crimmins & Seigfried-Spellar (2017), who found no relationship between engagement in such behaviour and participant self-esteem. Research exploring the relationship between self-esteem and cyberviolence is three-fold. Firstly, researchers have attempted to explore the impact of being victimised on self-esteem, although this is fraught with difficulty, given the need for retrospective examination of cyberviolence through survey and other designs. Whilst research has reported a link between lower self-esteem and cyberviolence, these studies are crosssectional and so aren't able to establish the temporal order of self-esteem and cyberviolence (Patchin & Hinduja, 2010). Secondly, investigation into the motivations behind perpetration have identified the possible significance of self-esteem to engaging in such negative online behaviour, although again this is difficult to ascertain not only due to methodological issues but also due to our need to present ourselves in a favourable way (Brewer & Kerslake, 2015), which can result in providing socially acceptable answers. Thirdly, the role of low selfesteem on online behaviour requires examination, as those with low self-esteem may engage in behaviours that may exacerbate the risk of being targeted, as noted by Varghese and Pistole (2017) who reported low self-esteem as being a significant predictor of both cyberbullying victimisation and perpetration.

Defining Conscientiousness.

As previously mentioned, the Big Five model of personality is the most cohesive and widely researched model available that explores interpersonal traits and impulse control. This includes conscientiousness, which is linked to being careful and efficient. Those who score

highly on measures of conscientiousness are orderly and have good impulse control and self-discipline. They are also norm compliant and seek to uphold the status quo (Barceló, 2017). It is becoming recognised as a critical component in successful social and economic outcomes including health and well-being, educational attainment and relationship stability (Tackman, Srivastava, Pfiefer, Dapretto, 2017). As with agreeableness, conscientiousness is a trait that is thought to develop in tandem with emotional maturity (Tackman et al., 2014).

Conscientiousness Online.

Conscientiousness is defined by dependability and also a desire for order and a systematic approach. This may explain its role as a protective factor for Internet addiction among online gamers (Kuss, van Rooij, Shorter, Griffiths, & van de Mheen, 2013) and those on social networking sites (Wilson, Fornasier, & White, 2010). Whilst these findings appear to fit with our knowledge of conscientiousness, a criticism of this research has been its reliance on cross-sectional data and lack of focus on age related differences (Stavropoulos, Kuss, Griffiths & Motti-Stefanidi, 2016). In an attempt to combat this, Stavropoulos et al. (2016) explored the link between conscientiousness and Internet addiction using a sample of Greek adolescents. They posit that the risk of Internet addiction and conscientiousness changes over time, with increasing conscientiousness associated with increased conformity to societal expectations (Leikas & Salmela-Aro, 2015). Stavropoulos et al. (2016) suggest that this finding may be due to lower impulse control in adolescents, and a preference for Internet use over less pleasurable activities such as homework. Whilst this is a useful finding, further research is needed to confirm this link, perhaps across the age range of social media users, particularly given that conscientiousness is thought to increase in one's twenties and again in one's forties (Roberts, Walton & Viechtbauer, 2006). Conscientiousness has also been linked to the ease with which social media users adjust to social media platforms (Tackman et al.,

2014) and their ability to complete tasks in online gaming that require greater diligence (Worth & Book, 2014), making it a potentially important trait for understanding engagement in online spaces.

Conscientiousness and Cyberviolence.

Given that conscientiousness relates to constraint and is also linked to deliberation and a desire to plan, as opposed to engaging in spontaneous or reckless acts, it would be reasonable to assume that it was incompatible with cyberviolence. This is supported by Zezulka and Seigfried-Spellar (2016) who explored lower reported conscientiousness, typified by hedonistic haste and negligence, and found a relationship between this and cyberbullying, a result that supports earlier findings (Çelik, Atak & Erguzen, 2012). However, research that has found a significant relationship between conscientiousness and cyberviolence is limited, leading to a need for further research to support or refute the findings of Zezulka et al. (2016) and Çelik et al. (2012).

Defining Openness to Experience.

Alongside extraversion, agreeableness and conscientiousness, an individual's openness to experience is thought to be a core part of their personality. According to Costa and McCrae (1992), openness to experience (OTE) is made up of six dimensions including a non-dogmatic approach, imagination, emotional complexity, sensitivity to art, behavioural flexibility and intellectual curiosity. Those with lower reported OTE tend to be more conventional in their outlook and have a narrower scope of interest. Individuals who score highly on measures of OTE are characterised by creativity, curiosity and imagination (Barceló, 2017). OTE is thought to be less impactful in relation to subjective well-being when

compared to other traits within the Big Five model (Steel, Schmidt & Schultz, 2008) and is thought to be unrelated to mental health issues (Malouff, Thorsteinsson & Schutte, 2005).

Openness to Experience Online.

Worth and Book (2014) suggest there is consistency between offline and online behaviours in line with the individual's personality traits. Given that those who report higher scores on measures of OTE are thought to seek out new experiences, it is understandable there may be a link with engagement with new and advancing technology. This is supported by Yee, Ducheneaut, Nelson and Likarish (2011), who found significant relationships between Big Five personality traits and online gaming behaviours, suggesting that those with greater scores on measures of OTE engage in more in-game exploration, which links to the inquisitiveness associated with this trait. However this is contested by McCreery, Krach, Schrader and Boone (2012) who found no significant relationship between OTE and in-game behaviour.

Openness to Experience and Cyberviolence.

OTE has been linked to creativity, which may explain its role in hyperbolic online exchanges, as noted by Zezulka and Seigfried-Spellar (2016) who suggest that a relationship exists between trolling behaviours and higher scores on measures of OTE. They link this to the expressiveness and lack of conventionality associated with this trait, suggesting that those individuals are less likely to be concerned by the violation of conventional social norms. The creative and expressive elements of OTE may also explain the hyperbolic, vitriolic material created and posted by trolls, which often features vivid imagery and elaborate scenarios. This is contested by Resett and Gamez-Guadix (2017) who found no significant relationship between cyberbullying and OTE. As with other areas of personality, research focus has been

centred on student populations and so requires expansion, utilising adults who frequent online spaces. There is also a paucity of research exploring OTE in relation to cyberviolence, leading to a need for further analysis to expand our knowledge of its potential role in engagement in negative online behaviour.

Whilst certain traits such as self-esteem can be seen as beneficial, given that those who are high in self-esteem have a positive view of themselves which is relatively independent from the opinion of others, other traits, including neuroticism and narcissism, can be conceptualised as negative traits that are inward focused and so impact on our view of ourselves and are also influenced by external factor. Given the emphasis on self-presentation on social media, it is important to explore these traits within social networking contexts.

Defining Neuroticism.

As with extraversion, discussion of neuroticism as part of an individual's temperament dates back to 450 BC (Barlow, Ellard, Sauer-Zavala, Bullis & Carl, 2014). Defined by Barlow et al. (2014) as the propensity to feel intense, recurrent negative emotions linked to an enduring feeling of uncontrollability, neuroticism is characterised by negative reactions to stress, emotional instability, a tendency for anxiety and feeling insecure. The development of neuroticism is thought to stem from heritable and psychological vulnerabilities, defined under Barlow's (1988, 2000) triple vulnerability theory. Across the lifespan, influence on neuroticism can vary; in younger people, genetics exert greater influence whereas the environment is a stronger influence on older adults (Laceulle, Ormel, Aggen, Neale & Kendler, 2013). In essence, neuroticism emerges in childhood and remains stable before decreasing during old age (Eaton, Krueger & Oltmanns, 2011), with continuity of neuroticism in older individuals suggested to result from cumulative effects in the environment (Barlow et al., 2014). Parenting style is also theorised to impact on neuroticism,

with unpredictable and intrusive, controlling or unresponsive caregiving associated with neuroticism (Barlow et al., 2014). Neurotic individuals can struggle in offline interactions due to their anxiety (Michikyan et al., 2014) and may, according to Eysenck (1996), engage in antisocial behaviour due to their emotional instability, which may lead to impulsive aggression, as well as experiencing an increased risk of developing mental health issues such as anxiety (Laceulle et al., 2013).

Neuroticism Online

Neuroticism has been linked to a tendency to be overtly emotional, which leads those high in neuroticism to gravitate towards wall posts and status updates, as well as instant messaging to assuage some of these feelings, according to Michikyan et al. (2014). In terms of online presentation, Tosun and Lajunen (2010) posit that neurotic individuals present their authentic selves online, particularly when engaging in anonymous contexts, although this is contested by Michikyan et al. (2014) who suggest that the self-presentation of neurotic young adults is strategic and malleable particularly on SNS that provide limited anonymity, such as Facebook. Research by Michikyan et al. (2014) found a significant association between neuroticism and false presentation of the self online in their sample of university students. Results suggested students who scored highly for neuroticism chose to present a false version of themselves that represented who they wanted to be and engaged in social comparison with other users, adhering to the belief that neurotic individuals are self-conscious.

Neuroticism and Cyberviolence.

Those high in neuroticism have a propensity for instant gratification and can struggle to control their urges, making them prime for engagement in impulsive online behaviour.

Neuroticism has been linked to both cybervictimisation and cyberaggression, with

Garaigordobil (2017) reporting increased levels of neuroticism within their sample of adolescents for those reporting victimisation and perpetration, although no potential explanation for this is offered. Seigfried-Spellar and Treadway (2014) have also suggested that higher neuroticism, which results in greater emotional instability, is a significant predictor of cyberbullying, a finding supported by Zezulka and Seigfried-Spellar (2016) who suggest that cyberbullies score higher on measures of neuroticism. As with other Big Five traits, research into neuroticism and cyberviolence is in its infancy and more knowledge is needed about its potential impact within online settings.

Defining Narcissism.

The final element of the dark triad of personality, narcissism, was named after the myth of Narcissus, an individual prone to vanity and self-aggrandisement who pined away over his own reflection. Defined as 'pathological' self-love (van Geel et al., 2017), narcissism is often attributed to Narcissistic Personality Disorder (NPD), however social psychological researchers have tended to focus on subclinical narcissism (Brummelman et al., 2016) or "normal" narcissists who may display some symptoms of NPD, but not at a level extreme enough for diagnosis (Foster et al., 2003). Those who score highly on narcissism scales, labelled as narcissists, are characterised by feelings of superiority, entitlement and an intense desire to be admired and respected by others and often appear to be grandiose (Brummelman et al., 2016). This leads to a positive view of the self, however, this does not necessarily correlate with high self-esteem, as even whilst feeling superior to those around them, narcissists can still remain unhappy with themselves and, given their focus on succeeding at all costs, can neglect bonding with others (Brummelman et al., 2016). Narcissism is mercurial, when praised and seemingly validated, narcissists feel elated, however soon deflate if this attention is not given. Whilst narcissism has had an intrinsically negative

connotation, from being associated with arrogance and disagreeableness, it has been argued that some positive outcomes are concomitant, including lower depression and social anxiety (Foster et al., 2003). One area of concern is the view of narcissism as a cohesive trait, which is inaccurate according to Ramayah, Ahmad, Jasmine, Yeap and Halim (2017) who argue that it is complex and multidimensional. This complexity has often been overlooked in favour of a narrow definition which allows for measurement resulting in a singular score. According to Ramayah et al. (2017), this does not fully capture the meaningful distinctions inherent in narcissism, although it must also be noted that a wide range of researchers have, over a number of years, advocated for this measurement of narcissism and so further research is needed to identify the most useful approach.

Developing during late childhood, at around seven years of age, narcissism is considered to be moderately heritable (Vernon, Villani, Vickers & Harris, 2008) and is thought to be shaped in part by parental over-evaluation, whereby parents perceive their child to be 'special', which over time leads to the internalisation of the self as superior to others, which lies at the core of narcissism (Brummelman, Thomaes, Nelemans, Orobio de Castro & Bushman, 2015). It has been suggested by Foster et al. (2003) that narcissism decreases over the life span, in part due to "disorder burnout", in which certain traits soften as characteristics associated with these traits are thought to be assuaged. Foster et al. (2003) also refer to "the reality principle model", which refers to the increasing experience of failure as we age due to career and education developments that aren't available during childhood. This experience of failure serves to deflate narcissistic impulses and so leads to a decrease as one ages.

Narcissism is also often referred to as the dark half of self-esteem, with researchers exploring the two traits in tandem (Vater, Moritz, & Roepke, 2018; Brummelman et al., 2016).

thought to be greater in males (Foster, Campbell & Twenge, 2003). Cultural differences have been noted, with those from individualistic cultures reporting higher levels of narcissism than collectivistic cultures (Vater et al., 2018), which may be unsurprising given the individualistic cultures' emphasis on the self, compared to the collectivistic cultures' focus on social values (Triandis, 1995).

Narcissism Online.

We are felt to be in the midst of a "narcissism epidemic" (Twenge & Campbell, 2009) which is attributed to a variety of factors including modern capitalist culture (Vater et al., 2018) but also our increasing online presence. Although, this increase in narcissism has been contested by other theorists (Donnellan, Trzeniewski & Robins, 2009), it does appear apt that, given the mercurial nature of this trait, online interaction may have an impact on, and be influenced by, user narcissism. The individualistic nature of online culture, with its focus on self-promotion and emphasis on a carefully curated presentation of the self for public approval provides opportunity for both praise and critique. As noted by Sheldon and Bryant (2016), social networking sites may be attractive to narcissists because they allow for greater control over the environment and normalise insubstantial relationships. These sites also allow for manipulation of media shared, giving an opportunity to present oneself as one would like to appear, which may be markedly different from offline reality (Shah & Tewari, 2016). Termed 'digital narcissism' (Bowen, 2016), some researchers have sought to explore this construct, however, others have sought to address the wider inequality in perception of narcissism, particularly in relation to selfie culture, from its gendered nature and the implications of this including how certain people are policed online compared to others (Maddox, 2017). This relates to the cyclic nature of selfie criticism, with women being seen as narcissistic for taking selfies and selfies viewed as narcissistic because women take them (Burns, 2015).

Arguing that selfies are a form of exhibitionism, specifically linking this to the phenomenon of selfie-related deaths, Maddox (2017) suggests that referring to such behaviours as narcissistic fundamentally misunderstands the key distinctions between the two constructs: narcissism relates to a lack of desire to share oneself, as one believes themselves to be superior, whereas exhibitionism refers to a desire to expose oneself to others. Regardless of critique, a growing body of literature has explored the role of narcissism in online behaviours, from its role as motivator for Instagram use (Sheldon & Bryant, 2016) to social media addiction (Ramayah et al., 2017) with a particular emphasis on selfie culture (Shah & Tewari, 2016). Research by Sorokowski, Sorokowska, Oleszkiewicz, Frackowiak, Huk and Pisanski (2015) found that narcissism was strongly linked to selfie-posting among men, although women were more prolific posters of selfies. Bogolyubova et al. (2018) suggest that narcissistic individuals are demarcated by the use of self-referential language, such as I statements on social media, although this is disputed by Carey, Brucks, Küfner, Holtzman, Roße Deters and Back (2015).

Narcissism and Cyberviolence.

Given the apparent increase in narcissism among Internet users, it is necessary to explore the potential impact of this trait on involvement in cyberviolence. Gibb and Devereux (2014) suggest narcissists may engage in negative online behaviour, defined within their research as cyberbullying, due to a misplaced belief that there is little social risk to their status as a result, linking this back to the grandiosity and sense of entitlement typical of this trait, Goodboy and Martin (2015) also found narcissism to be moderately associated with negative text and visual behaviours, suggesting narcissism plays a role in engagement in cyberbullying. Whilst most research has focused on the experiences of adolescents and college samples, Zerach (2016) explored the role of narcissism in a sample of adult dating app users. Zerach's (2016)

findings suggest that narcissism is related to cyberbullying victimisation and noted that homosexual men reported greater narcissism than women as well as reporting higher levels of dating victimisation when compared to homosexual women and heterosexual groups.

Narcissism has also been linked to negative behaviours within established relationships, with Smoker and March (2017) reporting a link between higher levels of narcissism and engagement in intimate partner cyberstalking, results which support those of Ménard and Pincus (2012). This is theorised to relate to the fear of rejection thought to be intrinsic to narcissism and the aggressive response that can ensue, if the individual feels shame as a result of having their ego threatened (Smoker & March, 2017). This is particularly pertinent in the context of intimate relationships, which may lead to narcissistic individuals feeling exposed and under threat due to their partner's knowledge of their flaws. This can result in a desire to control the dynamic and prevent 'narcissistic wounds', which may result from the breakdown of their relationship (Smoker & March, 2017).

Conclusion

A growing body of work has highlighted that cyberviolence can lead to serious consequences for children and young people including emotional distress and negative body image, however, less is known about the impact on adults (Bogolyubova et al., 2018). Research utilising college students has suggested a similar pattern of distress (Selkie, Kota, Chan & Moreno, 2015). This maladaptive response is linked to both victimisation and perpetration, with college student cyberbullies exhibiting increased suicidal thoughts and psychological symptoms (Schenk, Fremouw & Keelan, 2013).

As noted, cultural shifts across the developed world have led to societies that have become increasingly individualistic, with decreasing empathy and communal orientation coupled with increasing narcissism and positive self-evaluation (Hamamura & Septarini, 2017). The rapid

advancement of online engagement could have contributed to this increasingly individualistic perception. Given the significance of culture on shaping the self (Foster et al., 2003), it is important to explore the role of the increasingly pervasive online space on personality. There now exists a generation of young adults who have never been without the technology needed to facilitate immediate and constant interaction. There has also been a shift in the way older adults communicate and so there is a palpable need for closer examination of social networking and analysis of the impact this is having on our view of ourselves and also our ability to relate to those around us. The suggestion that increased focus on the self is having an impact on how we view ourselves may be unsurprising, particularly when considering the bombardment of inward facing material viewed on a daily basis online, from celebrity Instagram profiles to beauty and fitness bloggers on YouTube, which provide a distorted image of the world. The interlinking nature of these traits should not remain unacknowledged, whilst they have been dichotomised for clarity into traits that relate to the view of the self, versus those that relate to interaction with others, there are overlaps between the traits explored here. How we view ourselves is often linked to how we perceive the way others see us, as with narcissism, and how we see ourselves can also impact on how we relate to others.

As this review has demonstrated, research exists that suggests our presentation of ourselves online may be influenced by our personality and so it is an important area to explore (Michikyan et al., 2014). Given that the self is theorised to emerge through social interactions (Mead, 1934), analysis of how our social interactions are changing is imperative. Whilst our offline persona can be monitored and modified to create a favoured self-image, this can be affected during engagement in online spaces (Michikyan et al., 2014). It becomes clear that there are many gaps in existing knowledge surrounding the role of personality traits in

cyberviolence. Whilst some traits such as psychopathy have received empirical attention, this is not mirrored in other traits thought to be central to personality, such as agreeableness. It is also clear that researchers have devoted little time to exploration of traits that may impact on engagement with social media platforms, such as openness to experience. This highlights the need for further research to explore these personality traits within the relatively novel context of social networking sites.

The Present Study

A review of the existing literature surrounding cyberviolence reveals a number of distinct silos of research that have relied on offline definitions in online contexts and have drawn from specific demographics. This research has revealed commonalities across these demographics in terms of the behaviours classified and the prevalence of both perpetuating and being the recipient of cyberviolence. A review of research into personality also reveals a relationship between certain traits and cyberviolence (e.g. the dark triad), although these have been explored utilising similar populations to those used in existing cyberviolence research. Theoretically, feminist theorists have identified a gender imbalance in online user experiences, with women online being subjected to increasingly violent contact. This body of work has relied heavily on qualitative methodologies and has, by the volume of data gathered (see the work of Jane, 2017; 2016; 2015; 2014), indicated that cyberviolence is not an issue experienced only by a select population of women online. However, it is difficult to establish an idea of prevalence without quantitative methods.

This thesis seeks to expand upon the findings of these studies by exploring the role of key personality traits identified by well-established models including the Big Five model, and traits, such as empathy, in cyberviolence, utilising a more diverse sample of social media users than the specific cohorts identified in existing research. This thesis drew upon the findings of previous empirical study within the field of cyberviolence (as outlined in chapter 1) to identify salient personality traits (see chapter 3). The traits identified (see chapter 4) were chosen because they represented well-established models of personality which have a significant empirical grounding in psychological research. The traits utilised were also chosen because they related to both intra-and interpersonal factors which allowed for an exploration of the potential link between intrapersonal traits (e.g. self-esteem) and interpersonal traits

(e.g. psychopathy) and cyberviolence. Alongside personality, this thesis will also explore the role of participant gender in their experiences, both as victims and perpetrators. The findings of this thesis will contribute to the existing field by allowing for replication or repudiation of the findings of earlier researchers in terms of the significance of both personality traits and user gender in cyberviolence.

This research also seeks to explore cyberviolence utilising the typology identified in Chapter 1, rather than through the lens of a rigid offline definition. This typology proposes that behaviour can be classified according to the overarching motivation behind the behaviour, namely sexual, threatening and humiliating motivations. For sexual cyberviolence behaviours with a clear sexual motive include requesting and sending images. These behaviours are designed to elicit a sexual response, although this contact is unsolicited by the recipient. For threatening cyberviolence the motivation is to behave in an aggressive and threatening manner. This manifests in acts of aggression such as making offensive comments on posts. Acts of humiliating cyberviolence are designed to provoke embarrassment or shame and include sharing images on embarrassing websites. For each area, contact can be split into direct contact with the victim (e.g. asking for sexually explicit photographs) or indirect contact (e.g. sharing an embarrassing image with others), although there can be crossover with this, for example if an individual makes sexually demeaning remarks, this may be done in private correspondence with the recipient, or in a more public format (e.g. comments on social media posts). Similarly, there can be crossover with motivation, for example sharing sexual images with others can be seen as both sexual and humiliating cyberviolence, although for the purpose of this initial investigation using this typology, the categories are fixed for clarity.

The aim of this thesis is to explore cyberviolence using the typology proposed, within a diverse sample of social media users to identify the potential differences between ways of relating to others and to oneself through exploration of key personality traits and to identify whether the patterns that have emerged in the current field of research can be replicated. This thesis has the following objectives:

- To establish the prevalence of cyberviolence victimisation and perpetration and the
 three overarching themes of behaviour identified in the literature review (i.e. sexual,
 threatening and humiliating cyberviolence) and to identify whether any significant
 differences exist in terms of gender for those who engage in and are targeted by these
 behaviours.
- 2. To explore whether significant differences are observed between those involved in cyberviolence, as both victims and perpetrators, and those not, in relation to empathy.
- To identify possible differences in relation to the dark triad of Machiavellianism, narcissism and psychopathy for those involved in cyberviolence compared to those who report no involvement.
- 4. To explore the potential role of the Big Five personality traits in engagement in cyberviolence, either as victim or perpetrator, compared to those who do not engage in cyberviolence.
- 5. To identify possible differences in self-esteem for those who are victimised by cyberviolence or perpetrate cyberviolence in comparison to those who do not.
- 6. To explore potential differences in fear of negative evaluation for those involved in cyberviolence compared to those not involved.
- 7. To create a model of cybervictimisation and perpetration and identify which personality traits may have the most influence.

4. Methodology

Participants

The target population for the Who's Following You survey was social media users aged 13 years and older. This age restriction was imposed due to ethical concerns, as the majority of popular social networking sites (e.g. Facebook) are restricted to those aged 13 and above. This included individuals who had experienced and/or perpetrated cyberviolence via social media sites and those who had not had any negative online experience to enable prevalence to be established and to identify similarities and differences in scores on personality measures between victims, perpetrators and those who did not report negative experiences.

The sample consisted of 370 participants: 261 females (71%), 100 males (27%), and 9 participants who did not want to disclose this information (2%). The average age was 33 (M = 32.79, SD = 12.82). The youngest participant was 13 and the oldest was 77. The majority of the sample were current residents in the United Kingdom (N = 225, 61%), followed by North America (N = 59, 16%), Europe (N = 25, 7%), Asia (N = 22, 6%), Australia (N = 13, 3%), South America (N = 2, 1%) and Africa (N = 2, 1%). The remainder of the sample did not disclose this information (N = 22, 6%).

Instruments

1. Demographics.

Participants were asked to complete demographic information including age, gender and current country of residence.

2. Personality Measures.

Participants were asked to complete the following personality measures:

2.1 Basic Empathy Scale (BES).

Developed by Jolliffe and Farrington (2006) the BES is a 20-item measure (α = .72) that focuses on the two-factor model of empathy (i.e., cognitive and affective factors) and four basic emotions (i.e., anger, fear, happiness, and sadness). Individuals rate how much they agree with each statement using a five-point scale (1 = strongly agree, 5 = strongly disagree). An example statement is 'my friend's emotions don't affect me much'. The Basic Empathy scale has been used to explore links between Internet usage and empathy in young adults (Carrier et al., 2015) and to explore the role of empathy in engagement in (Schultze-Krumbholz & Scheithauer, 2009) and response to cyberviolence (Kokkinos et al., 2014).

2.2 Short Dark Triad (SDT).

The SDT developed by Jones and Paulhus (2014) is a 27-item questionnaire designed to measure the 'dark triad' of personality traits, which consists of three closely related yet distinct traits: Machiavellianism (α = .83), narcissism (α = .68) and psychopathy (α = .72). Individuals rate how much they agree with each statement on a five-point scale (1 = strongly disagree, 5 = strongly agree) with five items being reverse scored (1 = strongly agree, 5 = strongly disagree) and nine items allocated to each trait. An example statement is 'It's not wise to tell your secrets'. This scale has previously been utilised in studies examining cyber aggression in adolescents (Pabian et al., 2015), cyberbullying among college students (Goodboy & Martin, 2015) and trolling behavior (Buckels, Trapnell & Paulhus, 2014).

2.3 The Big Five Personality Measure (BFPM).

Developed by Goldberg (1993) the BFPM is a 50-item measure designed to assess the Big Five personality traits: extraversion (α = .36), agreeableness (α = .49), conscientiousness (α = .56), neuroticism (α = .75) and openness to experience (α = .62). Participants are asked to

rate how much they agree with each statement using a five-point scale (1 = disagree, 5 = agree). An example statement is 'I see myself as someone who is talkative'. Scores are calculated for each of the five personality traits. The Big Five personality traits have been found to be linked to Facebook bullying among university students (Kokkinos et al., 2016), and involvement in cyberbullying, (van Geel et al., 2017).

2.4 Rosenberg Self-Esteem Scale (RSES).

The RSES, developed by Rosenberg (1965) is a 10-item scale that explores self-esteem (α = .76). Participants are asked to rate how much they agree with each statement using a four-point scale (3 = strongly agree, 0= strongly disagree) with five items being reverse scored (0= strongly agree, 3 = strongly disagree) and higher scores indicating higher self-esteem. An example statement is 'On the whole I am satisfied with myself'. This scale has previously been used to explore links between low self-esteem and engagement in cyberbullying (Brewer & Kerslake, 2015; Kowalski & Limber, 2013).

2.5 Brief Fear of Negative Evaluation (BFNE).

Developed by Leary (1983), the BFNE is a 12-item questionnaire that examines fear of negative evaluation (α = .97), defined as feelings of apprehension about others' evaluations, distress over negative evaluations, and the expectation that others will evaluate one negatively. Participants indicate how characteristic each statement is on a five-point scale (1 = not at all characteristic of me, 5 = extremely characteristic of me). An example statement is 'I worry about what other people will think of me even when I know it doesn't make any difference'. Existing research has examined the relationship between positive and negative online contact and social anxiety using the BFNE in a sample of university undergraduate students (Bautista & Hope, 2015).

3. Experience/Perpetration of Cyberviolence.

Following the review of existing literature in Chapter 1, a number of behaviours were identified which were used to form the basis of the behaviours included in the survey. The behaviours included were the ones most frequently cited within existing research, where examples were provided (see Appendix I for the full list of behaviours). These behaviours relate broadly to public (e.g. commenting on someone's social media posts) and private (e.g. sending private messages) and direct (e.g. contacting the victim) and indirect (e.g. encouraging others to contact the victim) displays of cyberviolence. As noted in Chapter 1, three overarching themes of behaviour were identified which led to questions being asked in relation to these as separate areas. This was to allow for a general overview of the prevalence of cyberviolence and also for exploration of specific types of cyberviolence. Participants were asked to indicate how many behaviours they had experienced and how many they had perpetrated. These behaviours were split into the three overarching themes identified:

3.1 Sexual Cyberviolence.

Participants were asked whether anyone had ever asked them to do anything sexual on social media. If participants answered in the affirmative, they were asked to indicate what behaviours they experienced during the most severe instance (examples provided were being asked to share or receiving sexual images without a request to do so, asked to talk about sex or perform a sexual act online, having real/forged sexual images shared or experiencing sexually demeaning remarks). They were also given an option to provide details of any other sexual behaviours they had experienced through use of a free text section.

Participants were also asked whether they had ever perpetrated similar behaviours (examples provided were asking for/sending sexual images without a request to do so,

speaking about sex or sexual activity after being asked not to do so, asking someone to perform a sexual act online, making sexually demeaning remarks and sharing real/forged intimate images of someone). They were also given an option to provide details of any other sexual behaviours they had engaged in.

3.2 Threatening Cyberviolence.

Participants were asked whether anyone had ever behaved in a threatening or harassing manner towards them on social media. If participants answered in the affirmative, they were asked to indicate what behaviours they had experienced (examples provided included being sent harassing images or videos (e.g. of a violent or disturbing nature), receiving offensive messages privately through direct messaging and/or for others to see on social media, offensive comments/replies to posts, threats of self-harm if the victim did not engage or attempts to get other people to threaten or harass them). They were also given an option to indicate any other threatening/harassing behaviours they had experienced.

Participants were asked whether they had ever perpetrated similar behaviours (examples provided were sending harassing images or videos (e.g. of a violent or disturbing nature), sending offensive messages privately through direct messaging and/or for others to see on social media, offensive comments/replies to comments, threats of self-harm if the victim did not engage them or attempts to get other people to threaten or harass the victim). They were also given an opportunity to indicate any other threatening/harassing behaviours they had engaged in.

3.3 Humiliating Cyberviolence.

Participants were asked whether anyone had ever embarrassed or humiliated them via social media. If participants answered in the affirmative, they were asked to indicate what

behaviours they had experienced (examples provided included having embarrassing pictures or videos posted online, the spreading of rumours, having personal or contact information shared for others to see, embarrassing things being written on social media accounts or pages being created, information being shared on social media to embarrass or humiliate, online impersonation designed to embarrass with the information posted, being encouraged to share information and then having that information shared and images being published on embarrassing websites). As with threatening and sexual cyberviolence, participants were also given an opportunity to provide information about any other threatening/harassing behaviours they had experienced that were not captured by the behaviours listed.

Participants were asked whether they had ever perpetrated similar behaviours (examples provided included posting embarrassing pictures or videos of someone else, spreading rumours, sharing someone's personal or contact information for others to see, written embarrassing things on your/their/someone else's social media accounts, creating a page on social media about someone else, using information someone has shared on social media to embarrass or humiliate, impersonating another online in an attempt to embarrass them with the information posted, encouraging someone to share information then sharing that information, publishing images on embarrassing websites). They were also given an option to indicate any other embarrassing/humiliating behaviours they had engaged in.

Procedure

Participants were recruited via a social media campaign, which involved the link to the survey being shared on Facebook, Twitter, Instagram, the University of Huddersfield SONA system and Survey Circle and Call for Participants websites.

Upon clicking the survey link, participants were directed to the Bristol Online Survey website and were given the opportunity to consult an information sheet before completing the survey. If they were happy to continue, they had to complete a consent form, which required participants to acknowledge and respond to a number of statements relating to how the data would be stored, what it would be used for and how their right to anonymity and confidentiality would be ensured (i.e. by allocating a participant number). Before participants could move onto the survey, they were required to select a checkbox for each statement to ensure they had provided informed consent. If the consent form was completed participants were able to complete the survey (as outlined above). Upon completion, a debrief form was provided with further study information, links and information about support agencies and researcher email addresses to address any potential queries.

Ethics

Before data collection commenced, this research was approved by the University of Huddersfield ethics panel (see Appendix I), which ensured it adhered to British Psychological Society guidelines (British Psychological Society, 2014). This study was open to all social media users, ensuring participant discrimination was not an issue. Participant anonymity was assured as participants were not required to provide any identifying information, such as their name, date of birth or social media usernames. University of Huddersfield students provided their student ID for SONA credits, but this information did not allow for student identification. Participants were not subject to any researcher influence as this study was completed remotely without any direct contact with the research team. Whilst the study may have caused minor distress for participants, in that they were being asked to discuss events that may have been upsetting, this risk was minimal. The questions asked were worded as neutrally as possible to avoid this and participants were provided with information about

support services as part of the debrief form. Participants were also informed about the nature of the research to ensure researcher transparency and provided with contact details and information about how to withdraw from the study. To safeguard vulnerable populations, participation in this survey was limited to those aged 13 and over. This age limit was restricted to thirteen as social media platforms do not allow those who are under thirteen to create profiles. With respect to younger participants, adherence to ethical guidelines was maintained through the wording of the questions within the survey that avoided graphic descriptions of sexual or threatening acts (Appendix I). The measures used have been used with juvenile populations in previous research which supports their use with younger social media users in this research. The Basic Empathy Scale (Joliffe & Farrington, 2006) has been used to explore the role of affective and cognitive empathy in adolescent cyberbullying (Ang & Goh, 2010). The Short Dark Triad (Jones & Paulhus, 2014) was used by Pabian et al, 2015 to explore the role of the dark triad in adolescent cyberaggression. The Big Five measure has also been used with an adolescent sample, to explore the emergence of friendship networks in research carried out by Selfhout, Burk, Branje, Denissen, Van Aken and Meeus (2010). The Rosenberg (1965) Self-Esteem Scale has also been used previously with an adolescent sample in research conducted by Woods and Scott (2016) who explored the association between social media, sleep quality and self-esteem. The Brief Fear of Negative Evaluation (Leary, 1983) was utilised by Kocovski and Endler (2000) to explore the link between fear of negative evaluation, social anxiety and self-regulation amongst adolescents. This existing evidence base serves to highlight the appropriateness of the measures used for younger participants within this sample.

5. Results

In line with objective 1, the following study explores the prevalence of cyberviolence within the sample and identified whether gender played a significant role in cybervictimisation and perpetration.

5.1.1 Cyberviolence Prevalence

Table 1. Prevalence of cyberviolence victimisation and perpetration within the total sample (N = 370)

	Ye	es	No	
Type of Cyberviolence	N	%	N	%
Cybervictimisation	238	64	132	36
Cyberperpetration	116	31	254	69
Cybervictimisation/perpetration	110	30	260	70

Table 1 demonstrates that over sixty percent of the total sample had experienced some form of cybervictimisation and that over thirty percent of the sample had engaged in cyberperpetration. Thirty percent of participants could be identified as hybrid cases of cybervictimisation/perpetration.

Table 2. Prevalence of type of cyberviolence within the total sample (N = 370)

	Cybervicti	misation	Cyberperpetration Cybervictimisation		tion/perpetration	
Type of						
Cyberviolence	N	%	N	%	N	%
Sexual						
cyberviolence	158	43	70	19	63	17
Threatening						
cyberviolence	142	38	49	13	37	10
Humiliating						
cyberviolence	127	34	46	12	34	9

Table 2 shows that over forty percent of the sample had been the victim of sexual cyberviolence, and over thirty percent reported threatening and humiliating victimisation. In contrast, less than twenty percent of the sample reported engaging in any form of cyberviolence, although sexual cyberviolence was the most common type of cyberperpetration observed. Of those participants who identified as hybrid cases of victim and perpetrator, almost twenty percent reported engaging in sexual cyberviolence, compared to ten percent who engaged in threatening cyberviolence and nine percent who engaged in humiliating cyberviolence.

5.1.2 Cyberviolence Prevalence by Gender

Table 3. Prevalence of cyberviolence by gender within the total sample (N = 370)

	Fem	ale	Male	
Type of Cyberviolence	N	%	N	%
Cybervictimisation	167	45	64	17
Cyberperpetration	102	28	34	9
Cybervictimisation/perpetration	94	25	38	10

Table 3 demonstrates that female participants were more likely to report cybervictimisation than men, making up over forty percent of the total sample compared to less than twenty percent of male participants. Female participants were also more likely to perpetrate cyberviolence, with almost thirty percent of the sample reporting engagement in some form of cyberperpetration compared to less than ten percent of male participants, and were more likely to identify as hybrid cases of victimisation and perpetration, with twenty five percent reporting cybervictimisation/perpetration compared to ten percent of male participants.

A chi-square test of independence was performed to examine the relationship between gender and cyberviolence. The relationship between cybervictimisation and gender was significant, X^2 (2, N = 370) = 9.77, p = .008, and this effect was large (V = .16). Within this sample, female participants (84%) were more likely to report cybervictimisation than males (13%). A chi-square test of independence was also performed to examine the relationship between cyberperpetration and gender. The relation between cyberperpetration and gender was significant, X^2 (2, N = 370) = 11.93, p = .003, and this effect was large (V = .18), with female participants (60%) being more likely to report cyberperpetration than males (39%). Finally, a chi-square test of independence was performed to examine the relationship between gender

and cybervictimisation/cyberperpetration as a hybrid. The relation between this hybrid and gender was significant, X^2 (2, N = 370) = 13.38, p = .001, and the difference was large (V = .19). Within this sample, female participants (58%) were more likely to report cybervictimisation than males (40%).

Table 4. Prevalence of cybervictimisation by gender within the cybervictimisation subsample (N = 238)

	Female		Male	
Type of Cyberviolence	N	%	N	%
Sexual cyberviolence	110	46	42	18
Threatening cyberviolence	102	43	34	14
Humiliating cyberviolence	94	39	28	12

As demonstrated by Table 4, sexual cyberviolence was the most prevalent form of cyberviolence within this sample with over forty percent of female and almost twenty percent of male participants reporting some form of this behaviour. This was followed by threatening cyberviolence with over forty percent of female participants and almost fifteen percent of male participants reporting some form of threatening contact. Humiliating cyberviolence was the least common with thirty six percent of female participants and twelve percent of male participants reporting cybervictimisation.

A chi-square test of independence was conducted to explore the relationship between gender and each subtype of cybervictimisation. There was a significant relationship between gender and humiliating cybervictimisation, X^2 (2, N = 370) = 7.28, p = .026, and this effect was large (V = .14), with female participants (65%) being more likely to report cyberviolence than

males (39%). No significant difference was found for threatening cybervictimisation, X^2 (2, N = 370) = 1.31, p = .520, or sexual cybervictimisation X^2 (2, N = 370) = 5.01, p = .082.

Table 5. Prevalence of cyberperpetration by gender within the cyberperpetration subsample (N = 116)

	Female		Male	
Type of Cyberviolence	N	%	N	%
Sexual cyberviolence	35	30	31	27
Threatening cyberviolence	31	27	17	15
Humiliating cyberviolence	31	27	11	9

Table 5 shows that female participants within this sample were more likely to admit to perpetrating all types of cyberviolence, with the most frequent form being sexual cyberviolence, with thirty percent of participants reporting some involvement compared to twenty seven percent of male participants, followed by threatening and humiliating cyberviolence at twenty seven percent compared to fifteen percent and nine percent for male participants respectively.

A chi-square test of independence was also performed to examine the relationship between subtypes of cyberperpetration and gender. There was a significant relationship between gender and sexual cyberperpetration, X^2 (2, N = 370) = 7.64, p = .022, and the effect was large (V = .14) with female participants (57%) being more likely to report cyberperpetration than males (40%). No significant difference was found for humiliating cyberperpetration, X^2 (2, X = 370) = 3.61, P = .164, or threatening cyberperpetration X^2 (2, X = 370) = 4.95, Y = .084.

5.1.3 Types of Cybervictimisation by Gender

Table 6. Prevalence of sexual cyberviolence behaviours by gender within the cybervictimisation subsample (N = 238)

	Female		Male	
Sexual Cyberviolence Behaviour	N	%	N	%
Asked to share sexual images	100	42	34	14
Sent unsolicited images	69	29	23	10
Asked to talk about sex	69	29	8	3
Make demeaning remarks	62	26	15	6
Asked to perform sex act online	52	22	8	3
Shared images (real or forged) with others	24	10	6	3

Table 6 demonstrates that the most common behaviour for female and male victims of sexual cyberviolence was being asked to share sexual images, experienced by over forty percent of female participants and almost fifteen percent of male participants. Being sent unsolicited images was the second most frequent behaviour reported by approximately thirty percent of female and ten percent of male participants. For female participants the next most common behaviour was being asked to talk about sex, with over twenty five percent reporting experiencing this behaviour. For male participants, having sexually demeaning remarks made about them was the next most common behaviour reported, experienced by over five percent of male participants.

Table 7. Prevalence of threatening behaviours by gender within the cybervictimisation subsample (N = 238)

	Female		Male	
Threatening Cyberviolence Behaviour	N	%	N	%
Sent offensive messages	58	24	4	2
Made offensive comments	49	21	18	8
Replied in an offensive way	49	21	20	8
Posted offensive messages	48	20	20	8
Encouraged others to harass	35	15	19	8
Threatened to harm you	29	12	13	5
Sent upsetting images	23	10	2	1
Threatened to harm themselves	14	6	12	5

Table 7 shows that the most common forms of threatening cyberviolence for female participants were being sent offensive messages, followed by experiencing offensive comments, replies or posts which occurred in over twenty percent of cases. For male participants, receiving offensive replies and posts as well as experiencing others being encouraged to harass them were the most common behaviours reported by over five percent of participants.

Table 8. Prevalence of humiliating behaviours by gender within the cybervictimisation subsample (N = 238)

	Female		Ma	ale
Humiliating cyberviolence behaviour	N	%	N	%
Posted an embarrassing photo	39	17	9	4
Spread rumours	36	15	10	4
Written embarrassing things	32	13	2	1
Shared private information	23	10	6	3
Used information shared to embarrass	23	10	2	1
Online impersonation	13	5	4	2
Created social media page	10	4	3	1
Encouraged to share embarrassing information	8	3	0	0
Shared details on embarrassing site	7	3	0	0

Table 8 demonstrates that for female participants the most common humiliating behaviours reported were having an embarrassing photo shared, reported by almost twenty percent of female participants, and having rumours and embarrassing things written about them, reported by over ten percent of the sample. Male participants reported much lower frequencies of humiliating behaviours, with the most common being photographs and rumour spreading at four percent followed by the sharing of private information at three percent

5.1.4 Types of Cyberperpetration by Gender

Table 9. Prevalence of sexual behaviours engaged in by gender in the cyberperpetration subsample (N = 116)

	Fen	Female		ale
Sexual Perpetration	N	%	N	%
Sent a request for sexual images	17	15	25	22
Sent unsolicited sexual images	13	11	9	8
Asked someone to perform a sex act online	10	9	14	12
Asked someone to talk about sex	6	5	14	12
Made sexually demeaning remarks	6	5	7	6
Shared sexual images	2	2	5	4

Table 9 highlights a similar pattern for sexual cyberperpetration with female participants being more likely to send a request for sexual images and unsolicited sexual images, reported by over ten percent of the sample. Male participants were also more likely to report sending a request for sexual images, reported by over twenty percent of participants, followed by asking someone to perform a sexual act online or to talk about sex when they did not wish to do so, reported by over ten percent of male participants.

Table 10. Prevalence of threatening behaviours engaged in by gender in the cyberperpetration subsample (N = 116)

	Fen	Female		ale
Threatening Perpetration	N	%	N	%
Made offensive comments	13	11	4	3
Sent offensive messages	12	10	5	4
Replied in an offensive way	9	8	7	6
Posted offensive comments	8	7	8	7
Sent harassing images	4	3	6	5
Made threats to harm another person	4	3	4	3
Made threats to harm yourself	2	2	2	2
Encouraged others to harass another person	1	1	2	2

Table 10 demonstrates that the most common behaviours engaged in by female participants were making offensive comments and sending offensive messages, reported by ten percent of the sample. For male participants, the most common behaviours were posting offensive comments and replying in an offensive way, reported by over five percent of the sample.

Table 11. Prevalence of humiliating behaviours engaged in by gender within the cyberperpetration subsample (N = 116)

	Female		Male	
Humiliation Perpetration	N	%	N	%
Posted an embarrassing photo	16	14	5	4
Shared private information	10	9	2	2
Spread rumours	7	6	3	3
Online impersonation	7	6	7	6
Written embarrassing things	5	4	4	3
Created social media page	5	4	3	3
Used information shared to embarrass	4	3	2	2
Encouraged to share embarrassing information	1	1	2	2
Shared details on embarrassing site	1	1	2	2

Table 11 demonstrates that for female participants the most common behaviour was posting an embarrassing photo, reported by almost fifteen percent of the sample, followed by sharing private information, spreading rumours and online impersonation. For male participants the most common behaviour was online impersonation, reported by over five percent of the sample followed by posting an embarrassing photo, writing embarrassing things and creating social media pages designed to humiliate the recipient.

5.2. Empathy

To investigate objective 2, participant scores on the Basic Empathy scale (Jolliffe & Farrington, 2006) were explored in relation to their engagement in cyberviolence. Scores for both affective and cognitive empathy subscales were non-normally distributed, affective empathy has skewness of -2.056 (SE = .127) and kurtosis of 10.463 (SE = .253) and cognitive empathy has skewness of -.499 (SE = .127) and kurtosis of 9.825 (SE = .253). As a result, the non-parametric test Mann-Whitney U was utilised.

5.2.1 Affective Empathy

2.1.1 Cybervictimisation.

No significant difference was found between those reporting cybervictimisation (Mdn = 36.00, mean rank = 181.62) and those not (Mdn = 36.00, mean rank = 181.29), U = 15001.00, p = .977.

2.1.2 Sexual Cybervictimisation.

No significant difference was found between those reporting sexual cybervictimisation (Mdn = 36.00, mean rank = 183.54) and those not reporting victimisation (Mdn = 36.00, mean rank = 189.96), U = 16438.00, p = .760.

2.1.3 Threatening Cybervictimisation.

No significant difference was found between those reporting threatening cybervictimisation (Mdn = 36.00, mean rank = 184.85) and those not reporting victimisation (Mdn = 36.00, mean rank = 185.90), U = 16096.00, p = .926.

2.1.4 Humiliating Cybervictimisation.

No significant difference was found between those reporting humiliating cybervictimisation (Mdn = 36.00, mean rank = 180.92) and those not reporting victimisation (Mdn = 36.00, mean rank = 187.90), U = 14848.00, p = .550.

2.1.5 Cyberperpetration.

No significant difference was found for affective empathy scores between those reporting cyberperpetration (Mdn = 36.00, mean rank = 185.99) and those not (Mdn = 36.00, mean rank = 184.45), U = 14744.50, p = .897.

2.1.6 Sexual Cyberperpetration.

No significant difference was found between those reporting sexual cyberperpetration (Mdn = 36.00, mean rank = 181.76) and those not reporting perpetration (Mdn = 36.00, mean rank = 186.37), U = 10238.00, p = .744.

2.1.7 Threatening Cyberperpetration.

No significant difference was found between those reporting threatening cyberperpetration (Mdn = 36.00, mean rank = 172.39) and those not (Mdn = 36.00, mean rank = 187.50), U = 7222.00, p = .355.

2.1.8 Humiliating Cyberperpetration.

No significant difference was found between those reporting humiliating cyberperpetration (Mdn = 36.00, mean rank = 190.53) and those not reporting perpetration (Mdn = 36.00, mean rank = 184.79), U = 7220.50, p = .732.

2.1.9 Cybervictimisation/Perpetration.

No significant difference was found between those reporting cybervictimisation/perpetration (Mdn = 36.00, mean rank = 185.89) and those not (Mdn = 36.00, mean rank = 185.33), U = 14257.00, p = .963.

5.2.2 Cognitive empathy

2.2.1 Cybervictimisation.

No significant difference was found for scores on cognitive empathy between those reporting cybervictimisation (Mdn = 24.00, mean rank = 175.33) and those not (Mdn = 24.00, mean rank = 192.64), U = 13591.00, p = .128.

2.2.2 Sexual Cybervictimisation.

No significant differences were found between those reporting sexual cybervictimisation (Mdn = 24.00, mean rank = 180.61) and those not (Mdn = 24.00, mean rank = 189.14), U = 15976.00, p = .444.

2.2.3 Threatening Cybervictimisation.

A significant difference was found for scores on cognitive empathy between those reporting threatening cybervictimisation and those not, with those reporting victimisation (Mdn = 24.00, mean rank = 169.77) scoring lower those not reporting victimisation (Mdn = 24.00, mean rank = 195.30), U = 13954.00, (Z = -2.251), p = .024 and the difference was small (r = .05).

2.2.4 Humiliating Cybervictimisation.

No significant difference was found between those reporting humiliating cybervictimisation (Mdn = 24.00, mean rank = 184.32) and those not reporting victimisation (Mdn = 24.00, mean rank = 186.12), U = 15820.50, p = .877.

2.2.5 Cyberperpetration.

No significant differences were found between those reporting cyberperpetration (Mdn = 24.00, mean rank = 177.63) and those not (Mdn = 24.00, mean rank = 189.19), U = 13939.00, p = .329.

2.2.6 Sexual Cyberperpetration.

No significant differences were found between those reporting perpetration of sexual cyberperpetration (Mdn = 24.00, mean rank = 167.77) and those not (Mdn = 24.00, mean rank = 189.64), U = 9259.00, p = .120.

2.2.7 Threatening Cyberperpetration.

No significant difference was found between those reporting threatening cyberperpetration (Mdn = 24.00, mean rank = 187.77) and those not reporting perpetration (Mdn = 24.00, mean rank = 185.15), U = 7753.50, p = .872.

2.2.8 Humiliating Cyberperpetration.

No significant difference was found between those reporting humiliating cyberperpetration (Mdn = 24.00, mean rank = 183.29) and those not reporting perpetration (Mdn = 24.00, mean rank = 185.81), U = 7350.50, p = .880.

2.2.9 Cybervictimisation/Perpetration.

No significant difference was found on scores for cognitive empathy between those reporting cybervictimisation/perpetration (Mdn = 24.00, mean rank = 188.70) and those not (Mdn = 24.00, mean rank = 177.94), U = 13468.00, p = .372.

5.3. Short Dark Triad

To investigate objective 3, participants scores on the Short Dark Triad (Jones & Paulhus, 2014) were explored in relation to their involvement in cyberviolence. Scores for the Machiavellianism and narcissism subscales were normally distributed, however scores for the psychopathy subscale were non-normally distributed, with skewness of .429 (SE = .129) and kurtosis of -.057 (SE = .256). As a result, a combination of t-tests and Mann-Whitney U tests was used.

5.3.1 Narcissism

3.1.1 Cybervictimisation.

A significant difference was found on scores for narcissism between those reporting cybervictimisation and those reporting no victimisation, t(221.52) = 3.49, p = .001, with those victimised scoring higher (M = 23.50 SD = 5.70) than those not (M = 20.92, SD = 7.37). The magnitude of the differences in the means (mean difference = 2.57, 95% CI: 1.12 to 4.03) was small (eta squared = .03).

3.1.2 Sexual Cybervictimisation.

A significant difference was found between those reporting sexual cybervictimisation and those not, t(368) = 2.68, p = .008, with victims scoring higher (M = 23.61, SD = 6.00) than those not reporting victimisation (M = 21.80, SD = 6.68). The magnitude of the differences in the means (mean difference = 1.81, 95% CI: .483 to 3.13) was small (eta squared = .02).

3.1.3 Threatening Cybervictimisation.

A significant difference was found between those reporting threatening cybervictimisation and those not, t(368) = 1.99, p = .047, with victims scoring higher (M = 23.42, SD = 6.29)

than those not reporting victimisation (M = 22.05, SD = 6.52). The magnitude of the differences in the means (mean difference = 1.37, 95% CI: .02 to 2.72) was small (eta squared = .01).

3.1.4 Humiliating Cybervictimisation.

A significant difference was found on scores for narcissism for those reporting humiliating cybervictimisation and those not, t(302.54) = 1.97, p = .050, with victims scoring higher (M = 23.41, SD = 5.61) than those not reporting victimisation (M = 22.10, SD = 6.82). The magnitude of the differences in the means (mean difference = 1.31, 95% CI: .001 to 2.61) was small (eta squared = .01).

3.1.5 Cyberperpetration.

A significant difference was found on scores for narcissism for those reporting cyberperpetration and those not, t(368) = 2.55, p = .011, with perpetrators scoring higher (M = 23.81, SD = 6.37) than those not reporting perpetration (M = 21.99, SD = 6.43). The magnitude of the differences in the means (mean difference = 1.82, 95% CI: .4.16 to 3.23) was small (eta squared = .02).

3.1.6 Sexual Cyberperpetration.

A significant difference was also observed between those reporting perpetration of sexual cyberviolence and those not, t(367) = 2.34, p = .020, with perpetrators scoring higher (M = 24.17, SD = 6.77) than non-perpetrators (M = 22.18, SD = 6.33). The magnitude of the differences in means (mean difference = 1.99, 95% CI: .319 to 3.67) was small (eta squared = .02).

3.1.7 Threatening Cyberperpetration.

No significant difference was observed between those reporting perpetration of threatening cyberviolence (M = 22.80, SD = 7.18) and those not (M = 22.54, SD = 6.35), t(368) = .259, p = .796.

3.1.8 Humiliating Cyberperpetration.

No significant difference was observed between those reporting perpetration of humiliating cyberviolence (M = 22.53, SD = 6.33) and those not (M = 22.80, SD = 7.18), t(368) = .333, p = .740.

3.1.9 Cybervictimisation/Perpetration.

Significant differences were also observed for narcissism score between those reporting cybervictimisation/perpetration and those not, t(241.14) = 3.80, p < .001, with those reporting both victimisation and perpetration scoring higher (M = 24.37, SD = 5.61) than those not (M = 21.81, SD = 6.64). The magnitude of the differences in means (mean difference = 2.57, 95% CI: 1.24 to 3.90) was small (eta squared = .03).

5.3.2 Machiavellianism

3.2.1 Cybervictimisation.

A significant difference was found on scores for Machiavellianism for those reporting cybervictimisation and those not, t(368) = 3.00, p = .003, with victims scoring higher (M = 25.16, SD = 6.78) than those not reporting victimisation (M = 22.77, SD = 8.27). The magnitude of the differences in the means (mean difference = 2.39, 95% CI: .824 to 3.95) was small (eta squared = .02).

3.2.2 Sexual Cybervictimisation.

A significant difference was found between scores for Machiavellianism between those who reported sexual cyberviolence victimisation and those who did not, t(368) = 2.05, p = .041, with those reporting victimisation scoring higher (M = 25.21, SD = 7.06) than those who did not (M = 23.62, SD = 7.63). The magnitude of the differences in the means (mean difference = 1.59, 95% CI: .824 to .395) was small (eta squared = .01).

3.2.3 Threatening Cybervictimisation.

No significant difference was identified between those who reported threatening cyberviolence victimisation (M = 24.80, SD = 7.10) and those who did not (M = 23.98, SD = 7.62), t(368) = 1.03, p = .302.

3.2.4 Humiliating Cybervictimisation.

No significant difference was found between scores between those who reported humiliating cyberviolence victimisation (M = 24.67, SD = 6.82) and those who did not (M = 24.10, SD = 7.75), t(368) = .694, p = .488.

3.2.5 Cyberperpetration.

No significant difference was found for Machiavellianism scores between those reporting cyberperpetration (M = 25.06, SD = 7.57) and those not (M = 23.94, SD = 7.54), t(368) = 1.35, p = .177.

3.2.6 Sexual Cyberperpetration.

No significant difference was observed between those reporting perpetration of sexual cyberviolence (M = 25.21, SD = 8.27) and those not (M = 24.05, SD = 7.19), t(367) = 1.19, p = .236.

3.2.7 Threatening Cyberperpetration.

No significant difference was observed between those reporting perpetration of threatening cyberviolence (M = 24.16, SD = 9.37) and those not (M = 24.32, SD = 7.10), t(56.72) = -.111, p = .912.

3.2.8 Humiliating Cyberperpetration.

No significant difference was found between those reporting humiliating cyberperpetration (M = 23.85, SD = 9.01) and those not (M = 24.36, SD = 7.19), t(368) = -.438, p = .661.

3.2.9 Cybervictimisation/Perpetration.

No significant difference was found for Machiavellianism scores between those reporting cybervictimisation/perpetration (M = 23.83, SD = 7.58) and those not (M = 25.40, SD = 6.96), t(368) = 1.86, p = .063.

5.3.3 Psychopathy

Scores on the psychopathy subscale were non-normally distributed with skewness of -.149 (SE = .127) and kurtosis of .766 (SE = .253), as a result, the non-parametric test Mann-Whitney U was utilised.

3.3.1 Cybervictimisation.

A significant difference was found on scores for psychopathy between those reporting cybervictimisation and those not, with those reporting victimisation (Mdn = 20.00, mean rank = 199.70) scoring higher than those not reporting victimisation (Mdn = 16.00, mean rank = 160.20), U = 12395.00 (Z = -3.415), p = .001 and the difference was large (r = .17).

3.3.2 Sexual Cybervictimisation.

A significant difference was found on scores for psychopathy between those reporting sexual cybervictimisation and those not, with those reporting victimisation (Mdn = 20.00, mean rank = 203.45) scoring higher than those not (Mdn = 18.00, mean rank = 171.12), U = 13911.50 (Z = -2.792), p = .005 and the difference was large (r = .14).

3.3.3 Threatening Cybervictimisation.

No significant difference was found on scores for psychopathy between those reporting threatening cybervictimisation (Mdn = 20.00, mean rank = 196.25) and those not (Mdn = 18.00, mean rank = 178.81), U = 14662.00, (Z = -1.528), p = .127.

3.3.4 Humiliating Cybervictimisation.

A significant difference was found between those reporting humiliating cybervictimisation and those not, with those reporting cybervictimisation (Mdn = 20.00, mean rank = 202.44) scoring higher than those not (Mdn = 18.00, mean rank = 175.85), U = 13151.50, (Z = -2.279), p = .023 and the difference was medium (r = .11).

3.3.5 Cyberperpetration.

A significant difference was found on scores for psychopathy between those reporting cyberperpetration and those not, with those reporting perpetration (Mdn = 20.00, mean rank = 215.99) scoring higher than those not reporting perpetration (Mdn = 17.00, mean rank = 171.22), U = 11270.00 (Z = 3.758), p < .001 and the difference was large (r = .21).

3.3.6 Sexual Cyberperpetration.

A significant difference was found on scores for psychopathy between those reporting sexual cyberperpetration and those not, with those reporting cyberperpetration (Mdn = 21.00, mean

rank = 232.83) scoring higher than those not reporting perpetration (Mdn = 18.00, mean rank = 173.80), U = 7117.00 (Z = -4.174), p < .001 and the difference was large (r = .22).

3.3.7 Threatening Cyberperpetration.

A significant difference was found on scores for psychopathy between those reporting threatening cyberperpetration and those not, with those reporting cyberperpetration (Mdn = 21.00, mean rank = 217.03) scoring higher than those not reporting victimisation (Mdn = 18.00, mean rank = 180.69), U = 6319.50, (Z = -2.219), p = .026 and the difference was medium (r = .11).

3.3.8 Humiliating Cyberperpetration.

A significant difference was found on scores for psychopathy between those reporting humiliating cyberperpetration and those not, with those reporting cyberperpetration (Mdn = 20.00, mean rank = 220.22) scoring higher than those not (Mdn = 18.00, mean rank = 180.57), U = 5855.00, (Z = -2.36), p = .018 and the difference was medium (r = .12).

3.3.9 Cybervictimisation/Perpetration.

A significant difference was found for psychopathy scores between those reporting cybervictimisation/perpetration, with those reporting both victimisation and perpetration (Mdn = 21.00, mean rank = 220.18) scoring higher than those not (Mdn = 17.00, mean rank = 170.83), U = 10485.00 (Z = -4.06), p < .001 and the difference was large (r = .21).

5.4. Big Five

To investigate objective 4, participant scores on the Big Five measure (Goldberg, 1993) were explored in relation to their role in cyberviolence. Scores for each of the five traits were non-normally distributed, extraversion had skewness of -.123 (SE = .127) and kurtosis of -.550 (SE = .253), agreeableness had skewness of -.628 (SE = .127) and kurtosis of -.316 (SE = .253), conscientiousness had skewness of .224 (SE = .127) and kurtosis of -.307 (SE = .253), neuroticism had skewness of .290 (SE = .127) and kurtosis of -.659 (SE = .253) and openness to experience had skewness of -.774 (SE = .127) and kurtosis of .256 (SE = .253). As a result, the non-parametric test Mann-Whitney U was utilised.

5.4.1. Extraversion

4.1.1 Cybervictimisation.

No significant difference was found on scores for extraversion between those reporting cybervictimisation (Mdn = 20.00, mean rank = 188.89) and those not (Mdn = 20.00, mean rank = 179.46), U = 14957.50, p = .415.

4.1.2 Sexual Cybervictimisation.

No significant difference was found between those reporting sexual cybervictimisation (Mdn = 20.00, mean rank = 191.42) and those reporting no victimisation (Mdn = 20.00, mean rank = 181.09), U = 15813.00, (Z = -.920), p = .358.

4.1.3 Threatening Cybervictimisation.

No significant difference was found between those reporting threatening cybervictimisation (Mdn = 20.00, mean rank = 189.75) and those not (Mdn = 20.00, mean rank = 182.86), U = 15585.00, p = .546.

4.1.4 Humiliating Cybervictimisation.

No significant difference was found on scores between those reporting humiliating cybervictimisation (Mdn = 20.00, mean rank = 192.70) and those not reporting victimisation (Mdn = 20.00, mean rank = 181.74), U = 14516.50, (Z = -.937), p = .349.

4.1.5 Cyberperpetration.

No significant difference was found on scores for extraversion between those reporting cyberperpetration (Mdn = 20.00, mean rank = 186.36) and those not (Mdn = 20.00, mean rank = 185.10), U = 14766.50, p = .916.

4.1.6 Sexual Cyberperpetration.

No significant difference was found on scores between those reporting sexual cyberperpetration (Mdn = 20.00, mean rank = 196.78) and those not (Mdn = 20.00, mean rank = 182.87), U = 9710.00 (Z = -.981), p = .327.

4.1.7 Threatening Cyberperpetration.

No significant difference was found on scores between those reporting threatening cyberperpetration (Mdn = 20.00, mean rank = 174.02) and those not reporting victimisation (Mdn = 20.00, mean rank = 187.25), U = 7302.00, (Z = -.808), p = .419.

4.1.8 Humiliating Cyberperpetration.

No significant differences were found between those reporting humiliating cyberperpetration (Mdn = 20.00, mean rank = 194.00) and those not (Mdn = 20.00, mean rank = 184.29), U = 7061.00, p = .564.

4.1.9 Cybervictimisation/Perpetration.

No significant differences were found on scores for extraversion between those reporting cybervictimisation/perpetration (Mdn = 20.00, mean rank = 194.20) and those not (Mdn = 20.00, mean rank = 181.82), U = 13342.50, p = .308.

5.4.2. Agreeableness

4.2.1 Cybervictimisation.

No significant differences were found for agreeableness between those reporting cybervictimisation (Mdn = 30.00, mean rank = 186.78) and those not (Mdn = 30.00, mean rank = 183.23), U = 15458.00, p = .759.

4.2.2. Sexual Cybervictimisation.

No significant difference was found between those reporting sexual cybervictimisation (Mdn = 30.00, mean rank = 186.64) and those not (Mdn = 30.00, mean rank = 184.65), U = 16568.00, p = .860.

4.2.3 Threatening Cybervictimisation.

No significant difference was found between those reporting threatening cybervictimisation (Mdn = 31.00, mean rank = 190.38) and those who did not (Mdn = 30.00, mean rank = 182.46), U = 15494.50, (Z = -.694), p = .488.

4.2.4 Humiliating Cybervictimisation.

No significant differences were found between those reporting humiliating cybervictimisation (Mdn = 30.00, mean rank = 188.30) and those not reporting victimisation (Mdn = 30.00, mean rank = 184.03), U = 15074.50, p = .715.

4.2.5 Cyberperpetration.

No significant difference was found on scores for agreeableness between those reporting cyberperpetration (Mdn = 30.00, mean rank = 174.77) and those not reporting perpetration (Mdn = 30.50, mean rank = 190.52), U = 13602.00 (Z = -1.322), p = .186.

4.2.6 Sexual Cyberperpetration.

No significant difference was found between those reporting sexual cyberperpetration (Mdn = 29.00, mean rank = 173.11) and those not reporting perpetration (Mdn = 30.00, mean rank = 188.39), U = 9633.00 (Z = -1.077), p = .281.

4.2.7 Threatening Cyberperpetration.

A significant difference was found on scores for agreeableness between those reporting threatening cyberperpetration and those not, with those reporting cyberperpetration (Mdn = 27.00, mean rank = 139.59) scoring lower than those not reporting perpetration (Mdn = 30.00, mean rank = 192.51), U = 5615.00 (Z = -3.229), p = .001 and the difference was large (r = .16).

4.2.8 Humiliating Cyberperpetration.

A significant difference was found between those reporting humiliating cyberperpetration and those not, with those reporting cyberperpetration (Mdn = 29.00, mean rank = 148.08) scoring lower than those not reporting perpetration (Mdn = 30.00, mean rank = 190.81), U = 5730.50 (Z = -2.539), p = .011 and the difference was medium (r = .13).

4.2.9 Cybervictimisation/Perpetration.

No significant difference was found on scores for agreeableness between those reporting cybervictimisation/perpetration (Mdn = 30.00, mean rank = 178.05) and those not (Mdn = 30.00, mean rank = 188.65), U = 13481.00, p = .383.

5.4.3. Conscientiousness

4.3.1 Cybervictimisation.

No significant difference was found on scores for conscientiousness between those reporting cybervictimisation (Mdn = 24.00, mean rank = 185.48) and those not reporting victimisation (Mdn = 23.00, mean rank = 185.53), U = 15756.00, p = .997.

4.3.2 Sexual Cybervictimisation.

No significant difference was found between those reporting sexual cybervictimisation (Mdn = 23.00, mean rank = 178.11) and those not reporting victimisation (Mdn = 24.00, mean rank = 191.01), U = 15580.00 (Z = -1.149), p = .250.

4.3.3 Threatening Cybervictimisation.

No significant difference was found on scores between those reporting threatening cybervictimisation (Mdn = 23.00, mean rank = 179.39) and those not (Mdn = 24.00, mean rank = 189.30), U = 15320.00, (Z = -.868), p = .385.

4.3.4 Humiliating Cybervictimisation.

No significant difference was found between those reporting humiliating cybervictimisation (Mdn = 24.00, mean rank = 193.59) and those not (Mdn = 23.00, mean rank = 181.27), U = 14403.50, (Z = -1.053), p = .292.

4.3.5 Cyberperpetration.

A significant difference was found on scores for conscientiousness between those reporting cyberperpetration and those not, with those reporting cyberperpetration (Mdn = 22.00, mean rank = 159.86) scoring lower than those not reporting perpetration (Mdn = 24.00, mean rank = 197.50), U = 11843.00 (Z = -3.159), p = .002 and the difference was large (r = .16).

4.3.6 Sexual Cyberperpetration.

A significant difference was found between those reporting cyberperpetration and those not, with those reporting cyberperpetration (Mdn = 22.00, mean rank = 157.74) scoring lower than non-perpetrators (Mdn = 24.00, mean rank = 192.68), U = 8347.00, (Z = -2.675), p = .007 and the difference was medium (r = .13).

4.3.7 Threatening Cyberperpetration.

No significant difference was found between those reporting perpetration (Mdn = 22.00, mean rank = 160.63) and those not (Mdn = 24.00, mean rank = 189.30), U = 6646.00, (Z = -1.749), p = .080.

4.3.8 Humiliating Cyberperpetration.

No significant difference was found between those reporting cyberperpetration (Mdn = 21.00, mean rank = 156.76) and those not (Mdn = 24.00, mean rank = 189.58), U = 6130.00, p = .051.

4.3.9 Cybervictimisation/Perpetration.

No significant difference was found on scores for conscientiousness between those reporting victimisation and perpetration (Mdn = 23.00, mean rank = 169.17) and those not (Mdn = 24.00, mean rank = 192.41), U = 12504.00, p = .056.

5.4.4. Neuroticism

4.4.1 Cybervictimisation.

A significant difference was found on scores for neuroticism between those reporting cybervictimisation and those not, with those reporting victimisation (Mdn = 18.00, mean rank = 176.77) scoring lower than those not (Mdn = 20.00, mean rank = 201.05), U = 13692.50 (Z = -2.096), p = .036 and the difference was medium (r = .10).

4.4.2. Sexual Cybervictimisation.

No significant difference was found between those reporting sexual cybervictimisation (Mdn = 18.00, mean rank = 173.53) and those not reporting victimisation (Mdn = 20.00, mean rank = 194.42), U = 14856.00, p = .063.

4.4.3 Threatening Cybervictimisation.

There was a significant difference for neuroticism scores between those reporting threatening cybervictimisation and those not, with those reporting cybervictimisation (Mdn = 17.00, mean rank = 168.10) scoring lower than those not reporting victimisation (Mdn = 20.00, mean rank = 196.34), U = 13717.50 (Z = -2.471), p = .013 and the difference was medium (r = .13).

4.4.4 Humiliating Cybervictimisation.

No significant difference was found between those reporting humiliating cybervictimisation (Mdn = 19.00, mean rank = 187.20) and those not (Mdn = 17.00, mean rank = 184.61), U = 15214.00, p = .824.

4.4.5 Cyberperpetration.

No significant difference was found on scores for neuroticism between those reporting cyberperpetration (Mdn = 18.50, mean rank = 175.18) and those not (Mdn = 19.00, mean rank = 190.33), U = 13650.00, p = .204.

4.4.6 Sexual Cyberperpetration.

No significant difference was found between those reporting cyberperpetration (Mdn = 19.00, mean rank = 184.59) and those not reporting perpetration (Mdn = 19.00, mean rank = 185.71), U = 10436.00, p = .937.

4.4.7 Threatening Cyberperpetration.

No significant difference was found between those reporting threatening cyberperpetration (Mdn = 20.00, mean rank = 193.05) and those not (Mdn = 19.00, mean rank = 184.35), U = 7494.50, p = .595.

4.4.8 Humiliating Cyberperpetration.

No significant difference was found between those reporting humiliating cyberperpetration (Mdn = 20.00, mean rank = 189.97) and those not reporting perpetration (Mdn = 19.00, mean rank = 184.87), U = 7246.50, p = .762.

4.4.9 Cybervictimisation/Perpetration.

No significant differences were found on scores for neuroticism between those reporting cybervictimisation/perpetration (Mdn = 18.50, mean rank = 173.19) and those not (Mdn = 19.00, mean rank = 190.71), U = 12945.50, p = .149.

5.4.5. Openness to Experience

4. 5.1 Cybervictimisation.

A significant difference was found on openness to experience scores between those reporting cybervictimisation and those not, with those reporting victimisation (Mdn = 30.00, mean rank = 200.62) scoring higher than those not (Mdn = 28.00, mean rank = 158.55), U = 12176.50 (Z = -3.635), p < .001 and the difference was large (r = .18).

4.5.2 Sexual Cybervictimisation.

A significant difference was found on scores for openness to experience between those reporting sexual cybervictimisation and those not, with those reporting cybervictimisation (Mdn = 30.00, mean rank = 209.99) scoring higher than those not reporting victimisation (Mdn = 28.00, mean rank = 167.25), U = 12878.50 (Z = -3.807), p < .001 and the difference was large (r = .19).

4.5.3 Threatening Cybervictimisation.

There was a significant difference between scores for those reporting threatening cybervictimisation and those not, with those reporting cyberviolence victimisation (Mdn = 32.00, mean rank = 217.04) scoring higher than those not reporting victimisation (Mdn = 28.00, mean rank = 165.86), U = 11710.00, (Z = -4.481), p < .001 and the difference was large (r = .23).

4.5.4 Humiliating Cybervictimisation.

No significant difference was found between those reporting humiliating cybervictimisation (Mdn = 30.00, mean rank = 195.56) and those not (Mdn = 29.00, mean rank = 180.24), U = 14153.00, (Z = -1.309), p = .190.

4.5.5 Cyberperpetration.

No significant difference was found on scores for openness to experience between those reporting cyberperpetration (Mdn = 30.50, mean rank = 198.06) and those not (Mdn = 29.00, mean rank = 179.62), U = 13385.50 (Z = -1.548), p = .122.

4.5.6 Sexual Cyberperpetration.

No significant difference was found between those reporting sexual cyberperpetration (Mdn = 30.00, mean rank = 193.84) and those not reporting perpetration (Mdn = 29.00, mean rank = 183.55), U = 9916.00, p = .468.

4.5.7 Threatening Cyberperpetration.

No significant difference was found between those reporting threatening cyberperpetration (Mdn = 30.00, mean rank = 180.35) and those not (Mdn = 29.00, mean rank = 186.29), U = 7612.00, p = .717.

4.5.8 Humiliating Cyberperpetration.

No significant difference was found between those reporting humiliating cyberperpetration (Mdn = 29.00, mean rank = 184.99) and those not reporting perpetration (Mdn = 29.00, mean rank = 185.57), U = 7428.50, p = .972.

4.5.9 Cybervictimisation/Perpetration.

No significant difference was found on scores for openness to experience between those reporting cybervictimisation/perpetration (Mdn = 31.00, mean rank = 201.01) and those not (Mdn = 29.00, mean rank = 178.94), U = 12594.00, p = .069.

5.5. Self-Esteem

In order to explore the potential relationship between self-esteem and cyberviolence, in line with objective 5, scores on the Self-Esteem scale (Rosenberg, 1965) were compared between those who reported engagement in cyberviolence and those who did not. Scores for self-esteem were non-normally distributed, with skewness of -4.51 (SE = .127) and kurtosis of .348 (SE = .253). As a result, the non-parametric test Mann-Whitney U was utilised.

5.1.1 Cybervictimisation

A significant difference was found on self-esteem scores between those reporting cybervictimisation compared to those reporting no victimisation, with those reporting cybervictimisation (Mdn = 29.00, mean rank = 203.42) scoring higher than those not (Mdn = 16.00, mean rank = 153.58), U = 11514.50 (Z = -4.308), p < .001 and the difference was large (r = 0.22).

5.1.2 Sexual Cybervictimisation.

A significant difference was found on self-esteem scores between those reporting sexual cybervictimisation and those not, with those reporting cybervictimisation (Mdn = 18.00, mean rank = 201.91) scoring higher than those not (Mdn = 17.00, mean rank = 173.27), U = 14155.50 (Z = -2.552), p = .011 and the difference was medium (r = .13).

5.1.3 Threatening Cybervictimisation.

No significant difference was found on self-esteem scores between those reporting threatening cybervictimisation (Mdn = 18.00, mean rank = 198.60) and those not (Mdn = 17.00, mean rank = 177.34), U = 14327.50, p = .063.

5.1.4 Humiliating Cybervictimisation.

No significant difference was found between those reporting humiliating cybervictimisation (Mdn = 18.00, mean rank = 198.56) and those not (Mdn = 17.00, mean rank = 178.68), U = 13772.50, p = .089.

5.1.5 Cyberperpetration

A significant difference was found between scores on self-esteem for those reporting cyberperpetration and those not, with those reporting cyberperpetration (Mdn = 18.00, mean rank = 204.35) scoring higher than those not (Mdn = 17.00, mean rank = 176.67), U = 12643.50 (Z = -2.324), p = .020 and the difference was medium (r = .12).

5.1.6 Sexual Cyberperpetration.

There was no significant difference between those who reported sexual cyberperpetration (Mdn = 18.00, mean rank = 200.04) and those not (Mdn = 17.00, mean rank = 182.11), U = 9482.00, p = .206.

5.1.7 Threatening Cyberperpetration.

No significant difference was found between those reporting threatening cyberperpetration (Mdn = 18.00, mean rank = 202.00) and those not (Mdn = 17.00, mean rank = 182.98), U = 7056.00, (Z = -1.161), p = .246.

5.1.8 Humiliating Cyberperpetration.

There was no significant difference between those who reported humiliating cyberperpetration (Mdn = 18.00, mean rank = 201.34) and those not (Mdn = 17.00, mean rank = 183.25), U = 6723.00, p = .282.

5.1.9 Cybervictimisation/Perpetration

There was no significant difference between self-esteem scores for those who reported cybervictimisation/perpetration (Mdn = 18.00, mean rank = 186.91) and those not (Mdn = 17.00, mean rank = 184.90), U = 14144.50, p = .868.

5.6. Fear of Negative Evaluation

To identify the role of fear of negative evaluation in cyberviolence, as outlined in objective 6, participant scores on the Brief Fear of Negative Evaluation measure (Leary, 1983) were explored in relation to their engagement in cyberviolence. Scores for fear of negative evaluation (FNE) were non-normally distributed, with skewness of .145 (SE = .127) and kurtosis of -.799 (SE = .253). As a result, the non-parametric test Mann-Whitney U was utilised.

6.1.1 Cybervictimisation

No significant difference was found between scores for FNE for those reporting cybervictimisation (Mdn = 29.00, mean rank = 185.97) and those not (Mdn = 31.00, mean rank = 184.67), U = 15649.50, p = .910.

6.1.2 Sexual Cybervictimisation.

There was no significant difference between those who reported sexual cybervictimisation (Mdn = 27.00, mean rank = 181.58) and those reporting no victimisation (Mdn = 31.00, mean rank = 188.42), U = 16129.00, p = .543.

6.1.3 Threatening Cybervictimisation.

There was no significant difference between those who reported threatening cybervictimisation (Mdn = 29.00, mean rank = 185.83) and those reporting no victimisation (Mdn = 30.00, mean rank = 185.30), U = 16141.00, p = .953.

6.1.4 Humiliating Cybervictimisation.

There was no significant difference between those who reported humiliating cybervictimisation (Mdn = 27.00, mean rank = 180.26) and those reporting no victimisation (Mdn = 32.00, mean rank = 188.24), U = 14765.50, p = .496.

6.1.5 Cyberperpetration

No significant difference was found between those reporting cyberperpetration (Mdn = 27.00, mean rank = 175.98) and those not reporting perpetration (Mdn = 31.50, mean rank = 189.96), U = 13744.50, p = .241.

6.1.6 Sexual Cyberperpetration.

No significant difference was found between those reporting sexual cyberperpetration (Mdn = 26.50, mean rank = 176.44) and those not reporting perpetration (Mdn = 31.00, mean rank = 187.51), U = 9866.00, p = .431.

6.1.7 Threatening Cyberperpetration.

There was no significant difference between FNE scores for those who reported threatening cyberperpetration (Mdn = 29.00, mean rank = 180.57) and those reporting no perpetration (Mdn = 30.00, mean rank = 186.25), U = 7623.00, p = .729.

6.1.8 Humiliating Cyberperpetration.

A significant difference was found between those reporting humiliating cyberperpetration and those not, with those reporting perpetration (Mdn = 20.50, mean rank = 145.82) scoring lower than those not reporting perpetration (Mdn = 31.00, mean rank = 191.43), U = 5626.50, (Z = -2.591), p = .007 and the difference was large (r = .13).

6.1.9 Cybervictimisation/Perpetration

There was no significant difference between FNE scores for those who reported cybervictimisation/perpetration (Mdn = 30.00, mean rank = 185.48) and those who did not (Mdn = 29.50, mean rank = 185.51), U = 14297.50, p = .998.

Table 12. Summary of scores on BES, SDT, The Big Five, RSES and FNE scales for cybervictimisation, cyberperpetration and cybervictimisation/perpetration.

		Victimisation								
Pe	ersonality Traits	Cybervictimisation	Sexual	Threatening	Humiliating	Cyberperpetration	Sexual	Threatening	Humiliating	Hybrid
Em	Affective	ns	ns	ns	ns	ns	ns	ns	ns	ns
Empathy	Cognitive	ns	ns	LOWER *	ns	ns	ns	ns	ns	ns
Da	Narcissism	HIGHER ***	HIGHER **	HIGHER *	HIGHER *	HIGHER*	HIGHER *	NS	NS	HIGHER**
Dark Triad	Machiavellianism	HIGHER **	HIGHER *	ns	ns	ns	ns	ns	ns	ns
iad	Psychopathy	HIGHER ***	HIGHER **	ns	HIGHER **	HIGHER**	HIGHER ***	HIGHER	HIGHE R	HIGHER**
	Extraversion	ns	ns	ns	ns	ns	ns	ns	ns	ns
The	Agreeableness	ns	ns	ns	ns	ns	ns	LOWER ***	LOWER **	ns
Big	Conscientiousness	ns	ns	ns	ns	LOWER**	ns	ns	ns	ns
The Big Five	Neuroticism	LOWER *	ns	LOWER *	ns	ns	ns	ns	ns	ns
ξυ	OTE	HIGHER ***	HIGHER ***	HIGHER ***	ns	ns	ns	ns	ns	ns
	Self-esteem	HIGHER ***	ns	ns	HIGHER *	ns	ns	ns	ns	ns
	Fear of negative evaluation	ns	ns	ns	ns	ns	ns	ns	LOWER **	ns

Note. *p < .05, **p < .01, ***p < .001

5.7 Modelling Cyberviolence

To explore cyberviolence in more detail, it was necessary to create a model of cybervictimisation, cyberperpetration and the hybrid of cybervictimisation/perpetration, as outlined in objective 7. This analysis plan follows that of Navarro, Ruiz-Olivia, Larrañaga and Yubero (2015) who conducted t-tests to explore gender differences in their sample, followed by bivariate correlations to identify any significant relationships between study variables and finally a multiple regression to explore the link between cyberbullying and subjective well-being.

Following on from the parametric and non-parametric tests conducted in the preceding analysis, correlational analysis was conducted to identify any significant relationship between the study variables and cyberviolence. Given the dichotomous dependent variable, binary logistic regression was used, in line with Marcum et al's (2014) previous research. Hierarchical multiple regression was not appropriate due to a lack of existing theory to inform this analysis and so standard multiple regressions were carried out for cybervictimisation, cyberperpetration and victimisation/perpetration.

7.1 Cybervictimisation Model

Given the lack of existing theoretical frameworks for cyberviolence, it was decided that the most appropriate means of identifying the appropriate variables for inclusion in the cybervictimisation model was to identify the variables which were significantly correlated with cybervictimisation by running a bivariate correlation (see Appendix II). From this analysis, those variables which were significantly correlated with cybervictimisation were included in the multiple regression analysis.

Table 13. Model of cybervictimisation

R2	β	В	SE	CI (B)
.076*				
Model **				
Gender	.119*	.064	.027	.011118
Machiavellianism	005	.000	.005	009009
Narcissism	.079	.006	.005	004016
Psychopathy	.109	.008	.005	002019
Neuroticism	-0.52	003	.003	008003
OTE	.128*	.008	.004	.001015

Note. *p < .05, **p < .01, ***p < .001

Multiple regression was performed to investigate the ability of gender, Machiavellianism, narcissism, psychopathy, neuroticism and openness to experience to predict cybervictimisation. Preliminary analyses were conducted to ensure no violation of normality, linearity, homoscedasticity. Correlations were weak, ranging from r = -.12, p = .010 and r = .19, p < .001 indicating that multicollinearity was unlikely to be an issue (Tabachnick & Fidell, 2007). All variables were statistically correlated with cybervictimisation which indicates that the data was suitably correlated for examination to be reliably undertaken.

Given the lack of existing theoretical underpinning for this area of research, no a priori hypotheses were made to determine the appropriate order of variable entry and so a direct method was used for the multiple linear regression analysis. The variables included in the final model explained 7.6% of the variance in cybervictimisation (F(6, 363) = 5.01, p = <.001. Of the six predictor variables included, openness to experience and gender were statistically significant (see Table 12), with openness to experience recording a higher Beta value ($\beta = .128, p = .026$) than gender ($\beta = .119, p = .019$).

7.2 Cyberperpetration Model

As with cybervictimisation, appropriate variables were identified through exploration of the significant correlations between variables (see Appendix III).

Table 14. Model of cyberperpetration

	R^2	В	В	SE	CI(B)		
	.082*						
Model	**						
		.175*					
Gender		*	.092	.026	.040143		
Age		077	003	.002	006001		
Narcissism		.077	.006	.005	003014		
Psychopathy		.101	.007	.005	002016		
		-					
Conscientiousness		.133*	010	.004	.017002		
Note $*n < 05 **n < 01 ***n < 001$							

Note. *p < .05, **p < .01, ***p < .001

Multiple regression was performed to investigate the ability of gender, age, narcissism, psychopathy, and conscientiousness to predict cyberperpetration. As with cybervictimisation, preliminary analyses were conducted to ensure no violation of normality, linearity, homoscedasticity. Correlations were weak, ranging from r = -.13, p < .001 and r = .17, p = .004 and all variables were statistically correlated with cyberperpetration, which indicates that the data was suitably correlated for examination to be reliably undertaken.

As with the cybervictimisation model, no a priori hypotheses were made to determine order of entry and so a direct method was used. The variables included in the final model explained

8.2% of the variance in cyberperpetration (F(5, 363) = 6.51, p = <.001. Of the five predictor variables included, gender and conscientiousness were statistically significant (see Table 13), with gender recording a higher Beta value ($\beta = .175$, p = .001) than conscientiousness ($\beta = .133$, p = .011).

7.3 Cybervictimisation/perpetration model

As with the previous models, appropriate variables for the final model were identified through exploration of the significant correlations between variables (see Appendix IV).

Table 15. Model of cybervictimisation/perpetration

	R^2	В	В	SE	CI(B)
Model	.010*				
		.026*			
Gender		**	.097	.026	.046147
Age		088	003	.002	007000
Narcissism		.118	.008	.004	.000017
Psychopathy		.117	.008	.004	.000017
		-			
Conscientiousness		.105*	008	.004	015000

Note. *p < .05, **p < .01, ***p < .001

Multiple regression was performed to investigate the ability of gender, age, narcissism, psychopathy and conscientiousness to predict cybervictimisation/perpetration. As before, preliminary analyses were conducted to ensure no violation of normality, linearity,

homoscedasticity and correlations were weak, ranging from r = -.12, p = .012 and r = .19, p = <.001.

As previously mentioned no a priori hypotheses were made to determine order of entry and so a direct method was used for the analysis. The variables included in the final model explained 10% of the variance in cybervictimisation/perpetration (F(6, 364) = 8.13, p = <.001. Of the five predictor variables included gender and conscientiousness were statistically significant (see Table 14) with conscientiousness recording a higher Beta value ($\beta = .105, p = .041$) than gender ($\beta = .026, p < .001$).

6. Discussion

The aim of this thesis was to explore the phenomenon of cyberviolence within a diverse sample of social media users and to assess the potential role of personality factors and participant gender in cybervictimisation and cyberperpetration. This thesis also sought to explore cyberviolence according to the typology defined in chapter 1, in a departure from previous research which has relied heavily on offline definitions. Results suggest this typology may be a useful contribution to the field and may allow for diversification of the current position which relies so often on definitions which do not appear to be fit for purpose. The results also suggest that personality factors alone are not enough to explain an individual's engagement in cyberviolence, as victims, perpetrators or victim/perpetrators.

Prevalence

In terms of the prevalence of cyberviolence, it is clear that cyberviolence is a problem within this sample, given the frequency of behaviours reported. These findings build on those of earlier research utilising specific, often youth samples (Fenaughty & Harré, 2013) and suggests that cyberviolence is not an issue that disproportionately affects young people.

Sexual Cyberviolence.

Sexual cyberviolence was the most common form of cyberviolence reported in terms of both victimisation and perpetration, a finding that supports concerns from researchers including Jane (2017; 2016; 2015; 2014) who has noted the increasingly negative sexual attitudes that are becoming more prevalent online. It is important to conceptualise sexual cyberviolence within existing theoretical frameworks, namely as part of a deviant form of the 'acceptable' online sexual activity (OSA) defined by Döring et al., (2017) and Shaughnessy et al. (2014; 2011) and as part of Kelly's (1988) established continuum of sexual violence. The behaviours

outlined in this research fall under the OSA of sexual entertainment and sexual contact categories, in terms of seeking out sexual gratification from the soliciting of image- or text-based sexual material and the sharing of sexual material, regardless of its authenticity. In terms of Kelly's continuum, the prevalence of sexual cyberviolence for female participants supports the notion of a new frontier for misogyny and negative sexual attitudes. Of those victimised, many were asked to share a sexual image of themselves, closely followed by being sent unsolicited sexual images and being asked to talk about sex when they had expressed a desire not to do so, as well as receiving sexually demeaning remarks, which supports Jane's research into the prevalence of cyberbile.

It is important to note that male participants also reported relatively high levels of sexual cyberviolence, including being asked to share sexual images of themselves and receiving unsolicited images, mirroring the results of female participants. These findings represent one of few attempts to conceptualise male experiences of cyberviolence from the perspective of a victim and highlights that men are receiving similar levels of negative contact online.

However, more research is needed to establish the level of distress this may cause to male social media users and there is currently little in the way of theoretical exploration of this area of cyberviolence. This finding coupled with the prevalence of female perpetrators raises interesting questions about the ways in which online spaces may be altering our attitudes towards sexuality. In line with the 'instant gratification' culture prevalent in online dating applications, it may be that online sexuality is shifting towards a more inward facing approach, which could explain the frequency of image requests and sending or being sent unsolicited images. There is also the role of power dynamics within these online relationships, as female participants in this sample were more likely to report being the recipient of unsolicited images but were also more likely to send such images. The idea of

power play within the sending of unsolicited images fits with Jane (2017; 2016; 2015; 2014) and other feminist theorists' view that this act is an extension of offline misogyny and that by sending such images the sender is seeking to establish power over the recipient by removing their ability to consent to receiving the image. However, this does not explain women sending unsolicited sexual images of themselves. It may be that this is a new way for women to conceptualise their sexuality or that the shifting nature of social mores online makes it more acceptable for women to present themselves in this way. Based on these findings it is clear that further research is needed to explore the notion of online sexuality and how it may be altering interpersonal contact and conduct.

Threatening Cyberviolence.

Threatening cyberviolence was the second most frequent form reported by this sample, with receiving offensive messages being the most common behaviour reported by female participants. For male participants, more public displays of threatening behaviour were more common including receiving offensive comments, posts and replies on social media posts. Unlike sexual cyberviolence, in which the most common behaviours were private, threatening cyberviolence shares some of the performative elements associated with social learning theory, in that these behaviours are visible to online peers and appear designed to be viewed by an audience, as well as provoking a reaction from the victim.

Threatening online behaviour has not received the same amount of scholarly attention as sexual cyberviolence and so there is little specific theoretical underpinning to apply to these findings, however feminist theory, specifically Jane's work on gendered cyberbile is relevant here, as it explores the harmful nature of threatening online contact and suggests this style of problematic discourse is becoming increasingly accepted. It is clear from the prevalence reported that, within this sample, a number of participants had been the recipient of

'cyberbile' whether in public or in private. However, more research is needed to explore how the factors associated with the cybersphere (e.g. lack of physical proximity, lack of visual cues) may be impacting on users' willingness to behave aggressively online. It may be that online spaces have become a safe outlet for expression of thoughts and feelings that may seem inappropriate in other offline contexts, or there may be something intrinsic within these online spaces that results in aggression. As previously noted, it would appear remiss to suggest that online spaces cause aggression, however, there may be elements of social media that act as conduits for negative behaviours, which require further exploration to ascertain their potential role in facilitating cyberviolence.

Whilst there is little theoretical underpinning from which to explore threatening cyberviolence specifically, two theories have been applied to online behaviour more broadly which are applicable. The first is online disinhibition which refers to people's relatively uninhibited online behaviour when compared to their offline behaviour (Suler, 2005). It is possible for this disinhibition to manifest in a number of ways, including revealing hidden fears or emotions. This disinhibition can present in positive ways, termed benign disinhibition which results in acts of generosity and kindness. More often discussed is the opposite of benign disinhibition, a phenomenon termed toxic disinhibition. Toxic disinhibition manifests as rude, critical, angry, abusive and threatening behaviour.

Suler (2005) identified several factors which can account for the "loosening of the repressive barriers against underlying fantasies, needs and affect" (pp. 184) which manifests as online disinhibition. Dissociative anonymity, refers to the ways in which one's identity can be masked online. This includes the ability to create usernames which may have no obvious connection to the user's offline identity. According to Suler (2005), this is one of the most

important factors in online disinhibition, as this level of anonymity affords an opportunity to disengage online actions from our offline persona. This anonymity leads to the individual feeling less vulnerable when self-disclosing or behaving in a negative way. Due to the dissociative nature of this anonymity, individuals are not forced to 'own' their behaviour and can conceptualise their online self as distinct from their offline self, making it possible to evade responsibility for hostility or toxic online behaviour. Suler (2005) attributes this to a suspension of superego constraint within the 'online psyche'. Invisibility links to this anonymity and relates to the lack of visual cues in online spaces, with many users unable to see each other during their interactions. This, theorises Suler (2005), allows for people to express themselves with a courage they would otherwise lack if face to face with someone. This invisibility relates to the individual, in that they do not have to worry about how they may be perceived by others due to being physically invisible to online peers. It is also not possible to see any negative response from others when sharing or posting information which allows for reduced inhibition about the information shared. Invisibility also relates to interactions with others online as, even though it is possible to learn a great deal about someone through online interactions, it is not possible to see or hear someone whilst they are sharing this information. As Suler (2005) notes, "online text communication offers a built in opportunity to keep one's eyes averted" (pp. 185) which serves to limit the emotional connection between individuals online. Building on invisibility, the intrinsic asynchronicity of online communication also allows for online disinhibition. In direct opposition to face to face communication, online communication is asynchronous, with individuals interacting at different points in time. This disrupted communication style, which sees people taking hours, days or even months to respond to messages, allows for disinhibition because individuals do not have to contend with the immediate reactions of recipients. This results in a 'feedback loop' which reinforces some behaviour and inhibits others, shaping the course of selfdisclosure or conformity to social norms. Suler (2005) suggests that this results in quicker progression to expressions of online disinhibition, whether toxic or benign which results in an "emotional hit and run" (pp.186). Solipsistic introjection can be seen as a result of an individual's online anonymity and the invisibility of peers. Suler (2005) suggests that the lack of face to face cues in online spaces alter's one's self-boundaries and can result in the belief that one's mind has merged with that of the online peer one is communicating with. This is thought to be attributable to the lack of knowledge about said peer's voice or appearance which leads to the creation of such attributes during the flow of an online conversation. As a result, this imagined companion can become part of one's 'intra-psychic' world which is shaped in part by how the companion presents themselves but also in part by our own transferred expectations. Suler (2005) suggests that individuals often act out fantasies of arguments, flirting, or confrontation within the safety of this intra-psychic world and feel able to express themselves with a freedom unknown in reality. Online communication is thus able to mimic this intra-psychic world and afford one with the chance to 'act out' such fantasies whilst projecting attributes onto the recipient. In essence, one is talking to or with oneself which then encourages disinhibition. Combining easy dissociation with the creation of internalised characters, Suler (2005) suggests different processes emerge which reduce inhibition. In a process termed dissociative imagination, Suler (2005) argues that one can come to believe that the imaginary characters one creates exist within a different space and that one's own online representation exists within a 'transitional' world which is distinct from the responsibilities of the offline world. This dissociation leads to the perception of online life as a 'game' with norms which are distinct to those which apply offline. This dissociative imagination is particularly pertinent in online fantasy gaming during which an individual actively creates an imaginary character. Suler (2005) also identifies attenuated status and authority as a factor in online disinhibition. A person's position bears less impact online and

it is often difficult to identify who is in a position of authority. Authority is generally expressed through dress (e.g. uniform), body language or setting and the absence of these cues can thus reduce the impact of authority (Suler, 2005). In what may be perceived as an idealistic view of online spaces, particularly given feminist theorists discussion of the inequality in such spaces, Suler (2005) suggests that everyone has an equal opportunity in online spaces regardless of their offline status. However, Suler (2005) does acknowledge that offline status can spread into online spaces in relation to communication ability and technical knowledge. The ability to minimise authority contributes to toxic online disinhibition because it allows for the perception of a peer relationship which makes others more willing to act out in ways they would not when standing in front of an authority figure due to fear of punishment. The final factor in online disinhibition under Suler's (2005) theory is that of individual difference. Whilst Suler's (2005) view of personality is relatively simplistic, it does acknowledge that there are individual factors which affect how readily an individual becomes disinhibited. This susceptibility is influenced by the intensity of underlying drives including defence mechanisms and inhibition. According to Suler (2005) those with 'compulsive' styles are more restrained, 'histrionic' styles are more open and emotional and 'schizotypal' personalities are fantasy prone. These individual variables will interact with the factors discussed above and result in minimal variation between online and offline personas or more dramatic departures from offline expression depending on the individual's personality.

Although Suler's (2005) exploration of online disinhibition is one of the most widely cited, it has been critiqued by Voggeser, Singh and Goritz (2018) who built on Lapidot-Lefler and Barak's (2012) assertion that the anonymity of the internet is not the only factor involved in online disinhibition. As they note, many instances of online disinhibition occur in non-

anonymous settings such as Facebook and Twitter. Individuals still post inappropriate messages on these sites, as noted by video game journalist Alanah Pearce who found that young men were sending her sexually abusive messages from their personal Facebook pages which led to her being able to identify and inform their mothers about their behaviour (True, 2014). Engaging in this kind of negative behaviour with a visible and identifiable profile seems to jar with Suler's (2005) focus on the invisibility afforded online but does fit with Voggeser et al's (2018) exploration of online self-control failure.

Building on Suler's (2005) work, Voggeser et al (2018) view toxic online disinhibition through the lens of 'self control failure' suggesting that it is a result of a failure to recognise social cues. Voggeser et al (2018) rely on the definition provided by Vohs, Baumeister, Schmeichel, Twenge, Nelson and Tice (2008) which refers to the "self-exerting control" which can override a response with the assumption that the replacement of this response with another will allow one to conform to relevant standards. This fits with the key factor intrinsic to online disinhibition that is the violation of social norms. According to Carver and Scheier (2004, cited in Voggeser et al, 2018) self-control is a feedback system which fits with Suler's (2005) perception of online disinhibition as a distorted feedback loop. Within this system self-control is regulated by one's goals. To ensure these goals are achieved one must monitor the internal and external situation to watch for cues which link to this goal. If there is a mismatch between the current situation and the intended goal then one must modify one's behaviour. If there is a breakdown during this process then self-control failure can result. According to Voggeser et al (2018) there are three possible causes for online disinhibition; (1) it occurs when people wilfully intend to communicate inappropriately, (2) it occurs when people plan to behave appropriately and recognise that they need to modify their behaviour but are unable to do so, and (3) it occurs when people intend to behave appropriately, but fail

to realise that their behaviour requires modification. Voggeser et al (2018) posit there are two possible explanations for this resulting disinhibition, which are not defined as mutually exclusive. The first is that the internet may facilitate the dissemination of abuse which would have existed without it but may not have been seen by such a significant audience. The second is that the internet impacts on communication to such a degree that its existence increases the likelihood of people behaving negatively. For those who intend to behave inappropriately, online spaces provide ample opportunity for behaving negatively by giving them unfettered access to hundreds of thousands of potential targets across a wealth of platforms. The internet also provides multiple flash points for those who experience selfcontrol failure despite their intentions to regulate behaviour, including technical issues, connectivity, poor web design and interactivity which can result in "Internet rage" (Bratskeir, 2015). This rage impedes the ability to regulate communication and can result in disinhibited online behaviour. As Voggeser et al (2018) point out, the consumption of much online media allows for a reduction in attentive monitoring of one's behaviour, which impacts on those users who fail to recognise that their behaviour requires modification. Virtual communication lacks many of the fine-drawn social cues that are available offline, as noted by Suler (2005), including eye contact and expressions of disgust which serve to increase self-awareness. This can lead to users behaving inappropriately without recognising they are doing so because they lack any feedback from peers to alert them to their error.

Toxic online disinhibition has previously been linked to cyberaggression perpetration (Wright, 2014). Wachs and Wright (2014) have also related higher levels of toxic online disinhibition with online hate perpetration and suggest that a correlation exists between being a perpetrator and a bystander of online hate. This, they argue, emphasises the need to minimise exposure to such toxic online behaviour as, through repeated exposure, this

behaviour can become normalised. Whilst this study only focused on a cross sectional sample of adolescents, rather than taking into account the diverse range of individuals witnessing such behaviour, it does highlight the potential contagion effect possible online. When considering threatening cyberviolence, it is possible to see how the factors defined under Suler's (2005) theory may apply to this behaviour, given that toxic disinhibition is characterised by rude, angry, critical and aggressive behaviour. Whilst further research is necessary to build on the findings of this thesis, it is feasible that the anonymity afforded to users, the lack of visual feedback from victims and the lack of authoritative response to behaviour from platforms may normalise threatening cyberviolence. Voggeser at al's (2018) suggestion that disinhibition occurs because of a lack of context can go some way towards an explanation for some forms of cyberviolence, particularly sexual cyberviolence which, as discussed earlier in this thesis (see chapter 1), may be the unintended result of an individual's misguided attempt at intimacy. It becomes more opaque when discussing threatening cyberviolence, as the behaviours engaged in often rely on aggression or threats of some form of harm which are difficult to conceptualise as anything other than negative. However, it can be argued that the lack of context in many of these interactions allows for the perpetrator to manipulate the outcome of their behaviour and suggest that the recipient has misunderstood their intention. Whilst it appears that the first form of disinhibition, in which people wilfully behave inappropriately, relates most pertinently to cyberviolence, it is also possible that the other two categories defined by Voggeser et al (2018) may relate to acts of threatening cyberviolence. Those who are unable to modify their behaviour and those who fail to realise that their behaviour requires modification may experience the 'emotional hot states' described by Voggeser et al (2018). These hot states are thought to be caused by disagreement online, when encountering unacceptable (to them) perspectives. In an attempt to highlight the unacceptability of such perspectives, individuals may suspend social norms.

This may escalate into threatening behaviour in the face of disagreement. More detail is necessary about the content of the interactions reported in this thesis to assess the nature of the threatening contact. This would allow for examination of the potential progression of the interaction which may have started as a disagreement and then escalated into threatening cyberviolence. This type of interaction would fit more cohesively with the latter categories defined by Voggeser et al (2018). Conversely, it may be that threatening cyberviolence is the primary focus of the interaction which aligns with Voggeser et al's (2018) first classification. Toxic online disinhibition has been linked to decreased empathy (Voggeser et al, 2018) which supports the findings of this study but only in relation to cognitive empathy for those reporting threatening cybervictimisation. It is unclear how online disinhibition may relate to threatening cyberperpetration and so further research is needed to explore this. As noted by Buckels et al (2014) those with stronger 'dark' personality traits may cause intentional conflict online, rather than such conflict resulting from a lapse in self-control. Given the apparent link between psychopathy and threatening cyberperpetration it appears that this research lends support to the work of Buckels et al (2014) although again further research is needed to explore the possible link in more detail.

It is clear that online disinhibition can be applied to threatening cyberviolence. Alongside the theory of online disinhibition, it is worthwhile to consider the theory of moral disengagement. Moral disengagement is defined as the selective deactivation of the self-regulating processes which encourage good behaviour and discourage bad (Bandura, Barbaranelli & Caprara, 1996). Thus, moral disengagement allows for individuals to avoid distress (Faulkner & Bluic, 2016) and free themselves from self-sanctions or shame which can result when violating one's 'internal standards' (Wang, Lei, Liu & Hu, 2017). These standards are developed during childhood as part of the socialisation process, according to Bandura (2002), who

suggests the 'psychological mechanisms' involved in moral disengagement allow 'good' people to do or condone 'bad' deeds. Moral disengagement has been linked to cyberviolence with Meter and Bauman (2016) suggesting cyberbullies are able to reconstruct their behaviour via moral disengagement to make it appear less harmful. Wang et al (2017) support this, claiming that higher levels of moral disengagement are associated with cyberbullying. Lazuras et al (2013) also report a correlation between moral disengagement and cyberbullying, even after controlling for other factors including gender and Machiavellianism. A criticism of existing research linking moral disengagement to cyberviolence is its reliance on youth sampling that doesn't allow for comparisons with adult internet users which results in a paucity of understanding about how moral disengagement may link to the behaviour of older members of online spaces.

Bandura (2002) theorises that there are four main classifications of moral disengagement. The first involves reframing negative behaviour and can include advantageous comparison which leads to one's behaviour being seen as more favourable than other behaviours. This reframing can also include moral justifications which relate to making the behaviour appear more socially acceptable. The second classification is minimising or masking perpetrator behaviour. This can include displacing blame onto the victim or onto an authority figure that the perpetrator believes carries the responsibility for their actions. Minimising behaviour may also include highlighting how many others were involved in order to curtail the impact of their own involvement. The third classification is labelled misconstruing or disregarding negative consequences. This refers to the act of ignoring, minimising, disbelieving or avoiding the impact of behaviour. The final classification defined by Bandura (2002) is dehumanising or blaming the victim and suggesting they have done something to deserve their treatment. This theory has been linked to online racist comments by Faulkner and Bluic

(2017) who reported evidence of all classifications within their sample of comments on a popular newspaper's website discussion board. Wang et al (2017) also found support for the role of moral disinhibition in cyberviolence, specifically cyberbullying, when utilising Caprara et al's (2009) scale and reported that moral disengagement partially mediated the relationship between trait anger and cyberbullying with direct and indirect effects of trait anger on cyberbullying becoming non-significant when individuals displayed greater moral identity. When considering threatening cyberviolence, moral disengagement could be a useful theory to explore engagement in this behaviour. Actions explored in this study, such as commenting on, or posting to another's social media account, could be construed as justified depending on the material they posted. Similarly when acting as part of a 'cyber mob' it is easier to minimise one's behaviour by suggesting you were but one of many. This 'swarm' approach is becoming increasingly common on social media; a recent example is the case of Jessica Price, who was targeted by multiple individuals on Twitter in a mob attack which resulted in her losing her job. It is also possible to see how threatening online behaviour may be minimised or passed off as being less serious because it takes place online. Victim blaming and dehumanising has been noted anecdotally in response to threatening cyberviolence especially linked to the Incel (involuntary celibate) movement which uses dehumanising language to refer to those external to the movement, and also in debates around women's bodily autonomy, particularly in debates surrounding abortion and reproductive rights. Again, the lack of context afforded online could also allow for perpetrators to claim that they were 'joking' or that the recipient of the behaviour had misunderstood their intentions. The online environment is a perfect space for this strategy given the factors outlined by Suler (2005) which all allow for online misunderstandings and manipulation of meaning to alter the perception of negative conduct.

Humiliating Cyberviolence.

The least prevalent form reported by this sample was humiliating cyberviolence although again the performative nature of the behaviours reported, including posting embarrassing photos, does fit with social learning theory. Whilst it is not possible to identify from this research whether this is due to deviant peers encouraging behaviour or a general normalisation of humiliating online behaviours, it may be fair to assume that individuals who engage in this form of cyberviolence do so because they have a belief that this behaviour will be at least tolerated by their online peers.

As with threatening cyberviolence, there exists little in the way of theory behind humiliating contact online, although scholars such as Combs et al. (2010) have explored the nature of public humiliation offline, and it appears that this behaviour has readily transferred into online contexts, possibly due to the ease with which information can be shared. It is not possible to substantiate the notion of 'just desserts' described by Combs et al. (2010) without further research. However, this would be an interesting area to explore to identify whether social media users identify with this concept online from both perpetrator and bystander viewpoints. From a feminist perspective, humiliation of female participants may stem from the same motivation as sexual and threatening cyberviolence, which is designed to remove them from online spaces, as seen in the case of Anita Sarkeesian, however further research is needed to explore perpetrator motivation in more detail.

The prevalence of cyberviolence generally within this sample is interesting in terms of social learning theory, if this behaviour is apparently common within a relatively diverse sample of social media users who come from different demographic and cultural backgrounds, could this mean that users may come to accept cyberviolence as an inevitable by-product of engagement with platforms? Could it be that social media users are becoming desensitised?

As noted by Tittle et al. (2012), under social learning theory the impact of the socio-cultural environment is indirect making it applicable to social media platforms, which can be seen as another form of socio-cultural environment as there are social rules (e.g. community guidelines) to be adhered to. This marks out social media platforms as potentially influential spaces for the development of social conduct, spaces that transcend the physical limitations of offline socio-cultural settings. The potential impact of such a social structure is worthy of further examination, particularly given the increasing prevalence of such spaces. There are several factors which demarcate online and offline spaces. One of these factors is moderator inaction which results in little negative consequences for perpetrators and can result in their behaviour appearing acceptable to both the perpetrator and bystanders. This raises questions about the potential 'contagion' effect of cyberviolence and how regular viewing of such behaviour may alter the reactions of other users. When considering the behaviours defined as cyberviolence within this research, it is clear to see that offline engagement in many of these behaviours would result in some consequence for the perpetrator, especially behaviours which target the victim directly. The factors discussed by Suler (2004), including anonymity and physical proximity also differ online and offline. In public offline spaces people rarely lash out with verbal abuse, particularly towards strangers, there are criminal sanctions for exposing oneself to an unwilling recipient and it is much more difficult to share a humiliating or incriminating image of someone when one has to print out and distribute the image, which fits with Tarapdar and Kellett's (2012) assertion that minimal labour is a key element of cyberviolence. This is supported by the results of this research, which found that the most frequent behaviours for all types of cyberviolence were those that required minimal labour from perpetrators. In relation to sexual cyberviolence, this manifests as requests for images or the sending of unsolicited images, for threatening cyberviolence, making offensive comments or posts or replying or commenting on posts made by the recipient and for humiliating

cyberviolence, sharing an embarrassing image or spreading rumours. More involved activities that required greater perpetrator effort were much less common, such as sharing sexual images with others or on websites, or creating social media pages designed to embarrass someone. These behaviours require greater skill and commitment to causing harm than sending a message or sharing a photo, which suggests a greater motivation to harm the recipient, although further research would be needed to support this assumption. This 'low level' behaviour also fits with the notion of instant gratification as these behaviours can be carried out quickly with little pre-planning. Instant gratification is another online specific factor, given the instant access to other people and media. Coupled with this instant gratification is the inability to erase material. In the context of humiliating cyberviolence, as an example, if one sought to share an embarrassing photograph of someone by making and distributing multiple copies of the image, it is possible that all copies of the image could be destroyed. If an individual shares an image online it is difficult, if not impossible, to erase this image as it is not possible to track where this material may have travelled to. When considering the notion of instant gratification alongside the potential for a moment's frustration, anger or poor judgement to lead to the sharing of images, the making of threatening comments or requests for sexual contact, it is possible to see how online spaces may facilitate such behaviour more readily that offline spaces. As discussed by Suler (2004) the factors related to online disinhibition are specific to virtual environments and may all contribute to altered psychological or emotional states which make individuals more susceptible to engagement in cyberviolence.

According to Connell, Schell-Busey, Pearce and Negro (2014), gender differences do not appear to exist in cyberviolence, this is theorised to be due, in part, to the covert nature of online activity, which may make cyberviolence a more attractive prospect than offline

aggression. These findings were not replicated within this sample as female participants were more likely to be victims, perpetrators and victim/perpetrators. The results of this research suggest women are more likely to admit to cyberviolence perpetration than men, which may be due to fear of negative appraisal. In terms of victimisation, women report greater victimisation than men in all current research, a finding echoed here, although these conclusions are drawn from self-report data and so it may be that male participants minimised the impact of negative online behaviour. An alternative explanation is that, as has been noted by feminist researchers, the inequality faced by women offline has traversed into online spaces (McGlynn et al., 2017), leading to greater distress at being a recipient of cyberviolence, particularly when such content appears to have a gendered edge to it. The results of this research suggest that men are victimised in similar ways, although it may be that the impact is less due to differences in culture and socialisation around negative behaviours. Conversely, it may be that these differences impact on men's ability to acknowledge the effect of cyberviolence due to feeling that they should not be negatively affected, although it was not possible to locate existing research which has explored male experiences with this level of detail. Further research into the wider attitudes and beliefs held by those within online spaces is needed to explore this in more depth as it is clear that male social media users' experiences have not been explored with the same intensity as female experiences.

Personality and Cyberviolence

A central component of this thesis was the analysis of key personality traits, as defined under well-established models of personality, including the Big Five model and the dark triad to explore their potential relationship to cyberviolence. Analysis revealed a number of findings that both support and refute the findings of earlier research.

Interpersonal traits and Cyberviolence.

Empathy.

In terms of personality traits which refer to our capacity for relating to others, distinctions were found for those involved in cyberbiolence, with the exception of empathy and extraversion. Empathy was not found to be related to cyberviolence within this sample, with the exception of threatening cybervictimisation. This refutes earlier work that has linked higher empathy to victimisation (Kokkinos et al., 2014) and lower empathy to perpetration (Brewer & Kerslake, 2015; Ang & Goh, 2010). This finding is interesting as it suggests that empathy may not be as significant outside of the specific cohorts previously explored, namely juvenile populations. The lack of distinction in relation to empathy within this sample raises questions about the effectiveness of the Basic Empathy Scale to accurately measure empathy within this context. Whilst the Basic Empathy Scale is a validated measure that has been used with a range of Internet users, it does not focus specifically on empathy within an online context. It is possible that people's offline empathy does not translate to their interactions on cyberspace. Lack of visual cues, potential for anonymity and asynchronicity of the communication may disrupt traditional empathy cues and lead to differences in empathic response. This would support the view of Nitschke, Istrefi, Osterheider and Mokros, (2012) who state that empathy can be context-specific. It may be that empathy, as measured by the Basic Empathy Scale does not relate to online behaviour, and so respondents may have answered the survey honestly, but this does not reflect their online conduct.

As Chopik et al. (2017) posit, empathy can manifest in distinct ways within different cultural settings. This is a particularly pertinent problem when considering the global online community in which these results took place. Whilst the scope of this research was limited to social media, rather than including all forms of online communication such as online gaming

communities and blogs, the sample utilised came from a wide range of cultures including the United Kingdom, the United States of America, Australia, Europe and Thailand. These results may suggest differences in empathic concern across cultures making it difficult to ascertain whether it is possible to explore empathy on a global scale.

Extraversion.

Extraversion refers to the action of obtaining gratification from external sources. This generally relates to enjoyment of human interactions and thriving in the company of others. Given that extraversion relates to thriving off contact with others and a proneness to boredom when alone, it is feasible that those who are higher on extraversion may seek out contact with others, which leads to greater contact online and thus increases the likelihood of being targeted. This was not the case within this sample, a finding that refutes that of Festl and Quandt (2013). As no relationship was identified, it appears that a person's desire to engage with others is not linked to cyberviolence within this sample. This may be expected in relation to perpetration, however this leads to further questions about the personality of those targeted. Again, this was a measure of offline extraversion in an online context which may not adequately capture the expression of extraversion online.

Agreeableness.

The apparent lack of relationship between empathy and extraversion and cyberviolence within this sample is interesting, given the findings from previous research. Conversely, agreeableness, defined according to kind and considerate characteristics, with those high on this trait being straightforward, empathic and altruistic, as well as being compliant did appear to relate to perpetration. The results of this study show that agreeableness was lower for those reporting threatening and humiliating cyberperpetration, which supports the earlier work of

van Geel., (2017), Zezulka and Seigfried-Seller (2016) and Kokkinos et al. (2016), who all found a link between lower agreeableness and cyberperpetration. Given the association between agreeableness and conflict aversion (Barceló, 2017) it is unsurprising that lower levels of this trait are associated with cyberviolence, particularly threatening cyberviolence which is defined by aggression. It is also possible that those who are willing to engage in acts of humiliation or aggression would be less altruistic and kind as well as being non-compliant with prevalent social norms online. Whilst is appears that there is a little difference in relation to 'positive traits' between those involved in cyberviolence and those not, it is also important to explore the potential impact of 'dark traits' in this phenomenon.

Machiavellianism

In the majority, the results of this research support those of Fox and Rooney (2015) who found no relationship between cyberviolence and Machiavellianism due to the perceived unattractiveness of this medium to those who seek to control and manipulate interactions. Interestingly, there was an observed relationship between sexual cybervictimisation and Machiavellianism, which may be seen to support the earlier work of Craker and March (2016) who suggest that the fast pace of social media and the public nature of many interactions may not suit the needs of those who seek to control and manipulate others, leaving them vulnerable to being targeted. The link with sexual cybervictimisation may stem from a desire to manipulate relationships, attempts that are unsuccessful within online settings and result in being the victim of incidents of cyberviolence rather than achieving the victim's desired outcome. Further research would be necessary to explore this further, however, it may be that online settings subvert the behaviour of those who seek to manipulate intimate relationships, perhaps due to the lack of physical proximity or, in relation to dating applications, providing too much competition.

Psychopathy.

In contrast to Machiavellianism, psychopathy does appear to relate broadly to cyberviolence, which generally supports the findings of existing research, as a significant relationship was found for all types of cybervictimisation, perpetration and hybrid cases. These results support the assumption of Gibb and Devereux (2014) who suggest that those reporting higher levels of psychopathy are more likely to engage in cyberviolence, as do Goodboy and Martin (2015). This relationship is thought to be due to the impulsivity associated with psychopathy (Craker & March, 2016). This notion of impulsivity fits with the low effort methods utilised most frequently within the sample, the actions that require more intense effort, such as creating pages or impersonating another online are not as instantly gratifying or achievable when behaving impulsively, which may explain their relative scarcity here.

There is a well-developed evidence base for psychopathy throughout a range of disciplines. It is important to view psychopathy as a collection of traits, rather than a distinct entity and so it may be that certain facets of psychopathy link to certain facets of cyberviolence. As noted by Drislane et al., 2017) psychopathy can be split into three themes of boldness, meanness and disinhibition. These three themes fit well with cyberviolence, both in terms of victimisation and perpetration. For victims, disinhibition and boredom proneness may lead to impulsive engagement with individuals and platforms, which can lead to opportunities to be targeted. In terms of perpetration, meanness is an obvious fit for cyberperpetration, given the often harmful behaviours engaged in and the apparent disinterest in distress caused by one's behaviour, as well as the link with assertiveness, which can be attributed to contacting the victim directly. There appears to be a significant link between psychopathy and cyberviolence generally within this sample, given that differences were found between groups for victimisation and perpetration. This finding supports the work of Fox and Rooney

(2015) who also found that impulsiveness in online behaviour was linked to victimisation and perpetration, suggesting that this impulsivity is linked to taking less precautions online, this may be particularly relevant to sexual cyberviolence given the apparent link between recklessness and attractiveness (Fox & Rooney, 2015). It may be that those engaging in acts that may be perceived as sexual cyberviolence within this sample are trying to present themselves as reckless and exciting, but lack the social awareness to discern that their conduct may be detrimental to the recipient.

Fear of negative evaluation.

As has been noted FNE can be conceptualised as residing between the interpersonal and the personal, as it is a negative view of oneself that results in a belief that others will also view one negatively. No relationship was observed in relation to FNE and cyberviolence, with the exception of humiliating cyberperpetration. Those perpetrators scored lower, which may mean that those who engage in such behaviours are less concerned with a potential negative response. The results of this research are in opposition to those of Navarro et al. (2012) and Vander Eijnden (2014) who suggest there is a link between increased FNE and victimisation, although their research utilised adolescent samples and it may be a trait that one outgrows. However from this research it appears that an individual's concern about others opinion of them does not impact on their engagement in cyberviolence, although, as with all other measures used, this may be impacted by the use of an offline measure in this context.

View of the Self and Cyberviolence

Overall, it appears that there is a link between certain interpersonal traits and the various forms of cyberviolence, particularly the socially aversive traits, most notably psychopathy. It is also necessary to explore the potential link between intrapersonal traits and cyberviolence.

Neuroticism.

Neuroticism is linked to loneliness, depression and anxiety and fear, as well as difficulty in delaying gratification and managing urges. Results suggest a link between lower neuroticism and general cybervictimisation, conflicting with the findings of Garaigordobil (2017) who linked higher neuroticism to cyberviolence victimisation and perpetration. It may be that, as with the impulsiveness associated with psychopathy, those who score lower on measures of neuroticism were less likely to consider the potential consequences of risky behaviour online and so may been less aware of the risk of being targeted, although the lack of relationship to cyberviolence in the majority of the sample suggests that neuroticism may not play a significant role in cyberviolence.

Conscientiousness.

In contrast to the difficulty managing urges which typifies neuroticism, conscientiousness is defined by careful and vigilant conduct, as well as good impulse control and norm compliance. Conscientiousness was lower for those reporting sexual cyberperpetration.

Lower conscientiousness has been linked to engagement in cyberviolence by Zezulka and Seigfried-Spellar (2016) as well as Çelik et al. (2012), which results here support. It may be that those lower in conscientiousness may be less likely to adhere to the norms of social media, making them more comfortable engaging in conduct which other, more compliant, individuals would feel unable to engage in. This finding is in line with Gottfredson and Hirschi's (1990) GTC, which suggests impulsiveness is a driving force behind engagement in deviant behaviour. Given the apparent link between impulsiveness, not only in relation to lowered conscientiousness but also psychopathy, it may be that impulsivity is a key factor in cyberviolence, which requires further exploration.

Openness to experience.

OTE appears to be related to cybervictimisation, which could be linked to the curiosity and preference for variety associated with this trait, leading to a need to seek out new experiences and potentially placing victims within the orbit of perpetrators. It may be that the impulsive nature of OTE, which mirrors that of psychopathy and lowered conscientiousness, may lead to a greater engagement with online spaces and less deliberation about the potential outcomes. The findings from this study refute those of Zezulka and Seigfried-Spellar (2016) who reported a link between engagement in negative online behaviours and higher OTE. No significant differences were found for OTE for those engaging in cyberperpetration and those not in this sample, echoing the results of Resett and Gamez-Guadix (2017).

Self-Esteem.

When considering intrapersonal traits, it is vital to consider self-esteem, which refers to an individual's evaluation of their self-worth. Lower self-esteem has previously been linked to cyberviolence (Patchin & Hinduja, 2010). Results here refuted existing research as those reporting victimisation and perpetration also reported higher levels of self-esteem. The findings from this study appear to show that self-esteem does not play a role in an individual's decision to engage in cyberperpetration and, although this study was cross-sectional making it impossible to establish cause and effect, those victimised reported higher levels of self-esteem than those not. This appears to suggest that being targeted online may not have a detrimental impact on the victim in terms of their self-worth. It may also be possible that those who have greater self-esteem may feel more confident about engaging online and expressing opinions or posting material, rather than observing other users' activities, leading to more opportunities for them to be targeted due to their active online presence.

Narcissism.

Narcissism, often defined as the 'dark side' of self-esteem, is characterised by grandiosity and a craving for admiration. Narcissism was higher for those reporting cybervictimisation, cyberperpetration and hybrid cases. This is in line with findings from Gibb and Devereux (2014), Goodboy and Martin (2015), Zerach (2016), Craker and March (2017) and Ménard and Pincus (2012) who all reported a linked between narcissism and negative online behaviour. An interesting finding from this research was that narcissism was found to be a significant predictor of cyberviolence victimisation. This may be due to the essential components of narcissism as a character trait, which could lead to more risky behaviour online such as having open profiles, posting more information and sharing widely with unfamiliar social media users. As noted by Maddox (2017), narcissism stems from a desire to be viewed as superior to others and so negative behaviours, particularly in the form of sexual cyberviolence, may stem from a feeling of not being appreciated. Narcissism has also been linked to a sense of grandiose self-entitlement by Goodboy and Martin (2015) and so it may be that those who engage in sexual cyberviolence do not think there is any risk to them from engaging in such behaviour. There is also an intrinsic fear of rejection associated with narcissism, according to Ménard and Pincus (2012), which may link to engagement in sexual cyberviolence in that it may be easier to behave in aggressive or unpleasant ways than to risk being vulnerable to rejection, or such behaviour may result from feeling rejected by the victim. Further research would be useful here, to assist in clarifying the nature of the motivation behind the action. In terms of sexual cyberperpetration, it is possible that those who score highly on narcissism may resort to cyberviolence if they feel they are not receiving the attention they deserve or that their ego has been threatened or may be threatened by rejection, creating the potential for narcissistic wounds (Smoker & March, 2017). However,

there are also questions about constructions of narcissism and whether it is a 'socially aversive trait', leading to a need for further research to explore narcissism as a construct, particularly its expression in online spaces. Exploration of intra- and interpersonal traits demonstrated varied links to cyberviolence. It is useful to summarise these traits in relation to the three forms of engagement identified, cybervictimisation, cyberperpetration and victimisation/perpetration, to develop a personality profile of cyberviolence.

The Personality Profile of Cyberviolence

It appears that those involved in cyberviolence victimisation score higher on impulsive and socially aversive traits than those not involved, with a pattern of traits emerging in the form of greater narcissism alongside higher OTE. Increased OTE may lead to a desire to seek out new experiences, which, alongside lower neuroticism, may lead to less anxiety or concern about the potential risk of engagement with platforms that could lead to increased opportunities to be targeted by potential perpetrators. However, the cybervictimisation model revealed that only gender and OTE were significant predictors of cybervictimisation, which suggests that gender may indeed play a role in this phenomenon although further research would be needed to explore this finding.

Gender was also found to be a key trait in the models of cyberperpetration and cybervictimisation/perpetration alongside conscientiousness, which supports the idea of being less concerned with norm compliance, making it easier for perpetrators to engage in negative behaviours. It is interesting to note that, whilst the dark triad of traits was notable, in that those involved in cyberperpetration scored higher than those not involved, none of the traits were significant predictors within the model. This highlights the need for research that explores how these traits may relate to cyberviolence within different samples and, as noted previously, using an online-specific measure.

Certain key traits were found to be relevant within this sample, namely psychopathy, narcissism and OTE, all of which are associated with impulsiveness and risk taking. It is interesting to note the apparent significance of 'dark' personality traits in cyberviolence, for both victims and perpetrators. These results support those of Gottfredson and Hirschi (1990) in terms of those involved being insensitive, impulsive, short sighted and lacking in self-control, as well as being risk takers. This may relate to an inability to see the potential consequences of their actions or may relate to the minimal consequences available in online spaces. Openness to experience is clearly linked to cyberviolence within this sample. In terms of victimisation, this may lead to being open to opportunities that put the individual in the path of perpetrators. In relation to perpetration, those who engage in cyberviolence may be sensation seekers, or may be more proactive users of social media who, through this exploration, access a wider range of social media arenas and so have a potential wider pool of possible victims to draw from.

Implications

The prevalence of negative online behaviours within this sample suggests a need for education regarding online conduct. Platforms could include information about appropriate online conduct and the behaviours that constitute cyberviolence as part of the sign-up process to open an account in an active way, rather than including this as part of wider terms and conditions. By providing guidance at the point of signing up, users can be clear about what constitutes acceptable conduct. An issue with this approach is the potential individual differences in perceptions of cyberviolence. However, platforms can and do set guidelines around language which may constitute, for example, a hate crime and could do so with cyberviolence, according to the definition used in this research; if the victim perceives contact to be negative, then it can be classified as such.

Given the apparent prevalence of negative online sexual behaviour, it appears that there are issues of sexual misconduct in social media spaces that could be addressed in a number of ways. Social networking sites could disseminate information about appropriate and inappropriate conduct in user-friendly formats, such as using visual imagery and pop-up features that require acknowledgement from users to continue using the platform. This would ensure all users receive this information and may encourage victims to seek support and to report behaviour and cause perpetrators to reflect on and desist from negative online behaviour. As noted by feminist researchers (Jane 2017; McGlynn et al., 2017), this is not an isolated incident between two parties, although those targeted may feel that this is the case. By creating content that acknowledges and raises awareness of the prevalence of cyberviolence, platforms would provide validation for victims as well as offering the potential for support for perpetrators to encourage their desistance from this behaviour. At a general level, the findings of this research should encourage action from platforms to address concerns around cyberviolence. Currently, users can have accounts suspended or banned but are able to create new accounts, allowing perpetrators to continue to target potential victims. This demonstrates a need for platforms to take more action around banning those who repeatedly engage in cyberviolence through more active use of technology to deter perpetrators and minimise their ability to create multiple accounts. There is also a need for platforms and scholars to explore engagement in cyberviolence in more detail. In relation to victim experiences, by exploring the tools and techniques used by those who have managed to remain online despite experiencing cyberviolence, it may be possible to identify coping strategies. Conversely, by seeking to understand and offer support to those who perpetrate cyberviolence, it may be possible to proactively reduce incidents rather than seeking to provide support for victims after the incident has occurred.

In terms of offline impact, the results of this study could be developed into an educational tool designed to identify the behaviours and actions that constitute cyberviolence and also signpost to relevant support services. For younger participants this could be communicated as part of mandatory Personal, Social, Health and Economic Education (PSHE) classes, which are delivered as part of primary and secondary education in the United Kingdom, as well as during college and university induction programmes. This would allow for tailored approaches that provide relevant information about local and national support agencies for those victimised.

Limitations

One limitation of this research is the limited focus on online behaviours. Whilst this study allows for exploration of behaviours on social media, results cannot be applied to other popular online activities which have been linked to negative online behaviour, including online gaming (Tang & Fox, 2016) and comments on forums and online newspaper articles (Faulkner &

Given that these results cannot specify cause and effect, it is not possible to articulate whether the experience of cyberviolence was responsible for the differences in traits found here or whether these distinctions were already present. It is not feasible to address these issues, as it would be practically impossible to garner a sample that could be controlled adequately enough, given all the implicit variations that would need to be accounted for. However, it must be noted that no clear definitive answer can be provided about the impact of cyberviolence on a social media user's personality and vice versa. The results could suggest that those with particular traits, such as psychopathy, are manipulating online contexts to engage in cyberviolence. Conversely, it could be argued that the increasingly pervasive nature of negativity and hostility in online spaces, as well as platform inaction in the face of

such behaviour, is altering the personality of users resulting in opportunities for cybervictimisation and cyberperpetration.

A further limitation of this study is that each trait could not be examined in more detail as the measures used, such as the Short Dark Triad, are brief measures and thus a more in-depth analysis of each trait may have provided a clearer picture of the impact of each characteristic in cyberviolence. Whilst gathering more detailed personality information would require the development of trait specific measures, it would allow for a deeper understanding of social media users' personalities. Given that not all traits were found to be significant within this sample, it may be more useful to explore those which did appear to be relevant, such as narcissism, in more detail to further understand their role in cyberviolence.

As expected, the distribution between victimisation and perpetration was not equal, with more participants reporting victimisation than perpetration. This sampling issue is common in research that requires participants to disclose information that may make them appear in a negative light, although it does lead to issues with generalising findings to larger populations. Whilst this study was entirely anonymous, and attempts were made to phrase questions in as non-judgemental a format as possible, participants may have been reluctant to admit to themselves that they had engaged in negative online behaviours. It is also possible that participants had not viewed their behaviour as problematic prior to taking the survey and so could have been confronted with information that led to cognitive dissonance. Whilst participants may have felt comfortable inhabiting the role of the victim, and so were happy to disclose their experiences of cybervictimisation, they may not have been as comfortable inhabiting the role of perpetrator. It is difficult to ascertain a means of overcoming this issue, without engaging in deception, however, direct targeting of certain samples (i.e. those who

identify as trolls) may allow for investigation of a larger sample of perpetrators of cyberviolence.

Similarly, whilst this sample sought to explore cyberviolence within a representative sample of social media users, to validate or refute the results of previous research that utilised more specific samples, the sample currently equates to approximately 1% of the total social media population and so results require validation with larger-scale studies. Although, the geographical and demographic spread of this research is greater than any existing research, to the best of the author's knowledge, a larger sample would allow for greater generalisations to social media users. Whilst this study utilised a sample with a wide age range, it did not gather longitudinal data. In order to build on the work of Grühn et al. (2008) further research would be necessary to support the notion that social media use has any impact on personality over time. Although, as with any longitudinal research, attrition could be an issue, it would be useful to identify if ageing alongside social media use had an impact, as research has shown that our personality alters with our experiences across the lifespan.

One final limitation of this study was the lack of detail in relation to the content of interactions. Whilst it was possible to identify the prevalence of behaviours, the specifics of these were not captured, which leads to a paucity in understanding of the nature of the experiences of both victims and perpetrators. Whilst it appeared that the behaviours included seemed to capture the basic behaviours engaged in, more detail around the specificity of participant's experiences would provide a greater understanding of the context of cyberviolence.

Further Study

Whilst offline measures, such as the Short Dark Triad and Basic Empathy Scale, have been validated using a range of online samples, the applicability of such measures to cyberviolence remains in question. Further study could explore comparison between offline and online traits, such as empathy and the dark triad. Whilst distinctions were noted within this sample, these were found using questions that relate to offline behaviour. By asking participants a range of questions related to online and offline behaviour linked to key personality traits, it may be possible to distinguish between types of response. This would then allow for the development of context-specific measures that allow for the investigation of online presentation of key traits, providing an opportunity to explore the role of online spaces in the expression of such traits. Future research should also continue to explore personality traits in representative samples of social media users, to identify whether findings from studies utilising more specific samples (for example juvenile and student populations) can be replicated. Similarly, greater detail about the traits that make up the Big Five model (e.g. gregariousness, warmth and excitement-seeking associated with extraversion, as noted by Matthews, Deary & Whiteman, 2003) would allow for exploration of the potential significance of these subtraits in cyberviolence. There has been an expansion from the Dark Triad into the Dark Tetrad to include sadism. Further research could explore the link between sadism and cyberviolence which appears to fit with threatening and humiliating behaviour. Sadism has been linked to empathy (Sest & March, 2017) and so further research could explore the potential link between sadism, empathy and cyberviolence. It may also be plausible to suggest that those who engage in cyberviolence are, perversely, seeking contact with others. Further research could seek to address the role of loneliness in cyberviolence, to identify if this is a motivating factor.

Given that this research proposes a new typology, further exploration of this typology is needed to assess its utility with other samples and other behaviours, such as online gaming. It would also be prudent to explore this typology in connection with a well-established theory such as moral disengagement to consider how this typology may fit within an established theoretical perspective.

As has been noted, there was a lack of specificity around the content of the cyberviolence incidents reported. This leads to a need for qualitative research, which would allow for the expansion of knowledge around the ways in which acts of cyberviolence are being expressed. This includes detail about textual exchanges as well as the use of images. Further knowledge around the content of these incidents would allow expansion of Jane's existing assessment of the formulaic nature of cyberviolence and provide an empirical grounding for theoretical assessment about the socio-cultural factors that influence this form of discourse. Detail about the specific content of people's experiences would also allow for analysis of any gender bias within these exchanges. If indeed the content of cyberviolence is capable of being classified according to a wider context, including gender, then this raises further interesting questions about the role of online spaces in facilitation of such interactions and also the factors that underpin them. Such research would also build on the work of feminist researchers who have focused on the gendered nature of such exchanges.

Given the prevalence of sexual cyberviolence, further research is needed to explore this in more detail. This is one of the most fruitful areas of further research, given the rapid expansion in recent years of online sexuality and the means of facilitating this (e.g. the development of online dating applications). Further research could explore the ways in which Internet users are utilising online spaces to engage in sexual interactions, as well as analysing the ways in which the Internet is used to enable deviant sexual behaviour, as noted within this

research. There is also the apparent link between greater narcissism and sexual cyberviolence. This may be part of a wider shift in attitudes around sex and sexuality, enabled in part by the instant gratification culture within these applications, with potential partners available a swipe away giving users access to hundreds of potential partners. Whilst further research is necessary to garner a more comprehensive understanding of the role of social media and Internet use in our current sexual attitudes and behaviours, it does appear that the approach, at least within this sample, features a selfish, inward facing focus that does not acknowledge the desires or wishes of the recipient of that attention. This occurs in tandem with the concerns raised by feminist theorists about the use of sexual violence online as a means of silencing women and minimising their involvement in online spaces. There is also a gap in knowledge regarding male experiences of sexual contact online, which has not been explored in any great detail beyond their consumption of sexual material and their role as perpetrators. For understanding to develop, we must also explore the impact of being targeted online and also the roles men inhabit in terms of victimisation in more detail.

A final point to note is that it would be remiss to assume that a singular measure of personality could account for the totality of cyberviolence as a phenomenon and so such findings must be interpreted as part of a wider picture, inclusive of environmental and social factors. In order to explore the wider context in which cyberviolence occurs, further research could utilise qualitative methodologies to investigate this phenomenon in greater detail. This would build on the work of Jane and other feminist researchers and compliment the findings from this research. In-depth interviews with those involved in cyberviolence could provide a richer understanding of the milieu in which cyberviolence takes place and allow for discussion about the influence of the wider online environment on user behaviour. Further research could also explore existing theoretical frameworks such as social learning theory in

relation to online behaviour to identify the ways in which our changing social context may be altering our social interactions.

Conclusion

The main aim of this thesis was to explore cyberviolence within a diverse sample of social media users to identify whether the findings of research with specific populations would be replicated. This aim has been achieved and has resulted in the generation of further research ideas, which would continue to build on these preliminary findings.

A key finding of this research is the need for online-specific measures of personality. This has implications for existing knowledge in the field of online behaviour as currently there is a reliance on offline definitions. For this field of research to develop and knowledge to expand, it is necessary to explore traits such as empathy and self-esteem using measures that refer to online scenarios. The use of current measures, although well-established with various populations, does not allow for context-specific exploration of personality in online settings. By developing measures that explore the possible distinction between expression of personality traits online and offline, it will allow for a clearer picture of the role of the online space in personality, given that this research has highlighted that differences exist between those who engage or experience cyberviolence and those who do not, in relation to some of the most well-researched areas of personality.

The prevalence of cyberviolence within this study is one of the most significant findings. Given the number of participants reporting some engagement in cyberviolence, either as victims, perpetrators or both, its impact cannot continue to be minimised by providers and legislators. As this research shows, a large number of people have experienced some form of negative contact online. Given that this accounts for a fraction of social media users worldwide, we must assume that an even greater number of users are experiencing cyberviolence. This has implications for social media providers as the frequently cited strategies they suggest to minimise impact are inadequate (e.g. avoiding social media,

logging off). These strategies place emphasis on the victim to manage their victimisation rather than on platforms to remove perpetrators. They also present an issue because a social media presence is becoming increasingly necessary to access a wealth of opportunities including job offers. For sustainable change to take place, responsibility must shift from those targeted to those perpetrating such behaviours and to the platforms themselves who must seek out solutions to improve their users' safety online.

Overall, this thesis has demonstrated that cyberviolence does not belong to a niche corner of social media and is not perpetrated or experienced by individuals who are markedly different from the rest of the social media landscape. The results of this research demonstrate that, at the broadest level, we may all be potential targets, or indeed perpetrators, of negative online behaviour and that there is much that remains unexplored about this novel form of interpersonal violence. We are at a point in history when we have never been more connected, however, the quality and impact of those connections is fraught with potential for distress and negativity. In order to advance our understanding of the need to engage in such behaviour, as well as the impact of being a target of cyberviolence, we must, as researchers, legislators and policy makers, refrain from distinguishing between online and 'real life' and instead seek out holistic approaches to social media exploration which allows us to conceptualise the full breadth and scope of its role, not only in cyberviolence, but in the way we perceive the world around us. By fully understanding the role of social media in our conceptualisation of ourselves, our relationships with others and our cultural and social boundaries, we can begin to understand the symbiotic relationship between our creation of social media and social media's creation of us, which then allows us to see how our actions can shift from positive, entertaining and humorous engagement to vicious, threatening and harmful endeavours. Through understanding of this shift, we can seek to build a resilient

social media community which challenges and addresses cyberviolence, rather than condoning it through the inaction of those in positions of responsibility.

This research acts as a baseline and from it we can determine that an individual's personality alone is not enough to explain their involvement in cyberviolence. In terms of victimisation, these results lend support to the view that certain demographics may be at increased risk of being targeted. For perpetration, these results suggest that cyberperpetration is influenced by more than 'antisocial' personalities. For our knowledge to advance, we must move beyond the individual and explore the wider social context in which they exist, to attempt to understand the culture in which the individual resides and from this to form an integrated view of the individual within the collective social media space and the role cyberviolence plays in our online interactions.

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Appendix I

Dear Megan,

School Research Ethics Panel (SREP) Application Applicant Name: Megan Kenny (PhD)

Study Title: Who's Following You? Online Victimisation Through Social

Media

Reference(s): SREP/2016/045 & SREP/2016/045_Rev1_290616

I confirm that your SREP Application as detailed above was approved by SREP on 07-Jun-2016, with a further revision approved on 29-Jun-2016.

Best regards,

Kirsty Thomson (SREP Administrator)

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Appendix I cont.

THE UNIVERSITY OF HUDDERSFIELD School of Human and Health Sciences – School Research Ethics Panel

APPLICATION FORM

Please complete and return via email to:

Kirsty Thomson SREP Administrator: hhs_srep@hud.ac.uk

Name of applicant: Megan Kenny

Title of study: Who's Following You? Online Victimisation Through Social Media.

Department: Psychology Date sent: 02.05.2016

Please provide sufficient detail below for SREP to assess the ethical conduct of your research. You should consult the guidance on filling out this form and applying to SREP at http://www.hud.ac.uk/hhs/research/srep/.

Researcher(s) details	Megan Kenny
Supervisor(s) details	Dr Maria Ioannou and Dr Laura Hammond
All documentation has been read by supervisor (where applicable)	YES This proposal will not be considered unless the supervisor has submitted a report confirming that (s)he has read all documents and supports their submission to SREP
Aim / objectives	The aim of this research is to examine online victimisation through social media. This research has the following objectives; 1) to identify potential personality characteristics which may be shared by offenders, 2) to identify personality characteristics which may be shared by victims, 3) to identify potential protective characteristics from responses from participants who have not been

	victimised or perpetrated online victimisation, 4) to explore the behaviours which make up online abuse through social media and the frequency of such behaviours.
Brief overview of research methods	Data will be collected through an online survey. The majority of questions are quantitative; however, some free text boxes are included to provide potential qualitative data (see Appendix 2).
Project start date	October 2015
Project completion date	August 2017
Permissions for study	Participants will be recruited through social media and posters placed in public spaces. Permission will be sought around placing posters in such spaces.
Access to participants	Participants will be recruited through social media sites, namely Facebook, Instagram and Twitter. Details about the project will be shared through my social media accounts to approx. 600 people and a request will be made for those followers to share these details with their own followers. The aim of this recruitment procedure is to share the details of the project with as diverse a participant group as possible and to recruit as large a sample as possible.
Confidentiality	Participants will not be identifiable from their responses. Only my supervisors and myself will have access to the data and so confidentiality can be assured. None of the findings presented in the final thesis and any subsequent publications will allow identification of any individual. Data will be cleaned before analysis and an ID number will be assigned to each questionnaire to ensure confidentiality. It is not necessary for participants to be identified individually by name, however demographic information will be collected (e.g. age, gender, employment status etc.).

Anonymity	Data will be collected through the Bristol Online Survey (BOS). According to the BOS website, it is possible to anonymise data before analysis by hiding or permanently deleting information like email addresses, so anonymity is possible before analysis takes place, if this level of anonymity is required. As discussed above, access to the data will be restricted and ID numbers will be assigned.
Right to withdraw	Participants will be informed of their right to withdraw as part of the information sheet before they complete any questions. Participants will also be able to leave questions blank and can abandon the questionnaire without answering each question by navigating away from the BOS survey page.
Data Storage	Data will be stored using the BOS software. This programme is recognised by the University of Huddersfield and access to BOS will be granted by the University's IT department. Analysis will take place utilising SPSS. All data will be stored securely using password protected laptops and Unidesktop for SPSS. No hard copies of data will be held. If any data needs to be transferred this will be done through unimail and password protected files or an encrypted memory stick, however the use of any external USB device will be avoided as much as possible. Data will be stored for ten years.
Psychological support for participants	Questions have been designed to be as sensitive as possible and emotive language has been kept to a minimum. My email will be provided and participants will be informed that they can contact me for any further information. Details for Victim Support will be given for older participants and the NSPCC for younger participants. Information will also be provided within the debrief section about reporting online victimisation to social media sites.
Researcher safety / support (attach completed University Risk Analysis and Management form)	All data will be collected online and so no physical risk exists to the researcher.

Information sheet	An information sheet will be included with all details of the study before the questionnaire (see Appendix 1).
Consent form	A consent form will be included with tick boxes to indicate that participants have read and understood the ethical guidelines (i.e. that data will be confidential etc.), due to the nature of the online survey participants will not be able to provide a signature.
Letters / posters / flyers	A poster has been created which will be shared through social media accounts and also posted around the University of Huddersfield campus and other potentially viable locations, if permission is granted (i.e. my workplace, public spaces like libraries and community centres etc.) with the link to the online survey provided (see Appendix 5).
Questionnaire / Interview guide	Participants will be asked to complete a series of questions. These have been drawn from existing measures of personality and cyberbullying, instructions are included around how to complete the scales included but titles are removed so participants are unaware of the personality traits being measured (e.g. psychopathy). This is to avoid favourable responses from participants (see Appendix 3).
Debrief (if appropriate)	A debrief page will be included at the end of the questionnaire (see Appendix 4).
Dissemination of results	Findings from this study will be written up as part of my PhD thesis. Findings will be disseminated through academic publications and conferences as appropriate.
Identify any potential conflicts of interest	None identified. No external funding or support has been provided.

Does the research involve accessing data or visiting websites that could constitute a legal and/or reputational risk to yourself or the University if misconstrued? Please state No	
If Yes, please explain how you will minimise this risk	
guidance before completing the HYPERLINK "http://www.universitiesuk.acunsitiveResearchMaterial.pdf"	to Security Sensitive Information – please read the following these questions: uk/highereducation/Documents/2012/OversightOfSecuritySenuk/highereducation/Documents/
Is the research commissioned by, or on behalf of the military or the intelligence services? Please state No	
If Yes, please outline the requirements from the funding body regarding the collection and storage of Security Sensitive Data	

Is the research commissioned under an EU security call Please state No	
If Yes, please outline the requirements from the funding body regarding the collection and storage of Security Sensitive Data	
Does the research involve the acquisition of security clearances?	
Please state No	
If Yes, please outline how your data collection and storages complies with the requirements of these clearances	
Does the research concern terrorist or extreme groups?	
Please state No	
If Yes, please complete a Security Sensitive Information Declaration Form	
Does the research involve covert information gathering or active deception?	
Please state No	

Does the research involve children under 16 or participants who may be unable to give fully informed consent? Please state Yes	Participants will be recruited through social media platforms which are restricted to those aged 13 or over. However, given that this research features opportunity sampling, it may be that no participants under the age of 16 choose to take part. The focus of this research is not specifically limited to the experiences of those under the age of 16 and so they will not be explicitly targeted.
Does the research involve prisoners or others in custodial care (e.g. young offenders)? Please state No	
Does the research involve significantly increased danger of physical or psychological harm for the researcher(s) and/or the subject(s), either from the research process or from the publication of findings? Please state No	
Does the research involve risk of unplanned disclosure of information you would be obliged to act on? Please state No	
Other issues	

Where application is to be made to NHS Research
Ethics Committee / External
Agencies

Please supply copies of all relevant supporting documentation electronically. If this is not available electronically, please provide explanation and supply hard copy

All documentation must be submitted to the SREP administrator. All proposals will be reviewed by two members of SREP.

If you have any queries relating to the completion of this form or any other queries relating to SREP's consideration of this proposal, please contact the SREP administrator (Kirsty Thomson) in the first instance – hhs_srep@hud.ac.uk

Appendix 1

Title of Project

Who's Following You? Online Victimisation through Social Media

INFORMATION SHEET

You are being invited to take part in a study about online victimisation through social media. Before you decide to take part it is important that you understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it me if you wish. Please do not hesitate to ask if there is anything that is not clear or if you would like more information. You can contact me at megan.kenny@hud.ac.uk.

What is the study about?

The purpose of this study is to investigate online victimisation through social media (e.g. how are people being targeted, through which social media platforms etc.), to identify what factors can affect this (e.g. time spent online) and what relationship may exist between the person being targeted online and the person who is targeting them (e.g. strangers you have not met offline etc.).

Why I have been approached?

You have been asked to participate because you use social media and are over the age of 13.

Do I have to take part?

It is your decision whether or not you take part. If you decide to take part you will be asked to complete a consent form, and you will be free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect your use of social media. This study is not associated with any social media accounts and there will be no consequence to you if you chose not to take part.

What will I need to do?

If you agree to take part in the research you will be asked to answer a series of questions. This will take approximately fifteen minutes although you can take as much time to answer the questions as you wish.

Will my identity be disclosed?

All information disclosed will be kept confidential, and you cannot be identified by your responses. Only those involved in the research project will see your answers and your name will be removed from your response ensuring that you cannot be identified.

What will happen to the information?

All information collected from you during this research will be kept secure and any identifying material, such as names will be removed in order to ensure anonymity. It is anticipated that the research may, at some point, be published in a journal or report. However, should this happen, your anonymity will be ensured, although it may be necessary to use your words in the presentation of the findings and your permission for this is included in the consent form. Whilst your responses may be used, it will not be possible to identify you from those responses.

Who can I contact for further information?

If you require any further information about the research, please contact me on:

Name Megan Kenny Hammond

E-mail megan.kenny@hud.ac.uk l.hammond@hud.ac.uk Dr Maria Ioannou

m.ioannou@hud.ac.uk

Dr Laura

Appendix 2

CONSENT FORM

Title of Research Project: Who's Following You? Online Victimisation through Social Media

It is important that you read and understand the consent form. Your contribution to this research is entirely voluntary and you are not obliged in any way to participate, if you require any further details please contact the a member of the research team at megan.kenny@hud.ac.uk, m.ioannou@hud.ac.uk or l.hammond@hud.ac.uk.

I have been fully informed of the nature and aims of this research as outlined in the \Box
information sheet version 1, dated 02.05.2016
I consent to taking part in it
I understand that I have the right to withdraw from the research at any time understand that I have the right to withdraw from the research at any time without giving any reason
I give permission for my words to be quoted (by use of pseudonym)
I understand that the information collected will be kept in secure conditions □
for a period of 10 years at the University of Huddersfield
I understand that no person other than the research team will
have access to the information provided.
I understand that my identity will be protected by the use of pseudonym in the
report and that no written information that could lead to my being identified will be included in any report.

If you are satisfied that you understand the information and are happy to take part in this

Who's Following You?

project, please put a tick in the box aligned to each sentence.

Appendix 3

 ${\it Please provide some demographic information by answering the questions below.}$

Do you identify as?	
Male	
Female	
Prefer not to say	
Is the gender you identify with the same as the gender you were	
born with? Yes	
No	
Prefer not to say	
How old are you?	
Are you?	
Heterosexual	
Homosexual	
Bisexual	
Pansexual	
Asexual	
Other (please specify)	
Prefer not to say	-
Are you?	
Single	
In a relationship	
Casually dating	
Married	
Divorced	
Widowed	
Other	
Are you?	
Employed	
Self-employed	
A volunteer	
Out of work and looking for work	
Out of work but not currently looking for work	
A homemaker	
A student	
In the military	

What is the highest level of education you have currently completed? How many social media sites do you have (please tick all that apply)? Facebook Instagram WhatsApp Twitter Snapchat Pinterest LinkdIn Flickr Tinder Grindr Other (please specify) Why do you use social media? I enjoy sharing and posting information My friends all use it and so I feel I have to I promote myself or business opportunities through social media I worry that if I did not I would miss out on things Other (please specify) What do you usually post online? Personal content (e.g. selfies) Content you find online (e.g. funny pictures or memes) Comments on social issues (e.g. news stories) Other (please specify)	Retired		
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The following questions examine your engagement with technology and social media. Please indicate your answer by ticking/crossing the most appropriate box.

How often do you:	Nev	Onc	Seve	On	Seve	Onc	Seve	On	Seve	All
	er	e a	ral	ce	ral	e a	ral	ce	ral	the
		mont	times	а	time	day	time	an	times	tim
		h	a	we	s a		s a	hou	an	e
			mont h	ek	week		day	r	hour	
1. Read e-mail on a mobile phone.										
2. Get directions or use GPS on a mobile phone.										
3. Browse the web on a mobile phone.										
4. Listen to music on a mobile phone.										
5. Take pictures using a mobile phone.										
6. Check the news on a mobile phone.										
7. Record video on a mobile phone.										
8. Use apps (for any purpose) on a mobile phone.										
9. Search for information with a mobile phone.										

10. Use your mobile phone during class or work time.										
Do you have a social me "no", skip to the Attitud			-	nswer	is "yes	," con	tinue wi	ith iten	n 11; if	
How often do you do each of the following activities on social networking sites such as Facebook?	Nev er	Onc e a mont h	Seve ral times a mont h	On ce a we ek	Seve ral time s a week	Onc e a day	Seve ral time s a day	On ce an hou r	Seve ral times an hour	All the tim e
11. Check your Facebook page or other social networks.										
12. Check your social media account(s) from your smartphone.										
13. Check your social media account(s) at work or school.										
14. Post status updates.										
15. Post photos.										
16. Browse profiles and photos.										
17. Read postings.										
18. Comment on postings, status updates, photos, etc.										
19. Click "Like" to a posting, photo, etc.										
The following questions e ticking/crossing the most		•		elatio	nships.	Please	indica	te you	r answe	r by
Please answer the for questions about your friendships:										

1. How many friends do you have on social media?	
2. How many of these friends do you know in person?	
3. How many people have you met online that you have never met in person?	
4. How many people do you regularly interact with online that you have never met in person?	

The following questions examine your attitudes towards the internet and technology. Please indicate your answer by ticking/crossing the most appropriate box.

	Strongl y disagre e	Disagree	Neither agree nor disagre e	Strongly agree
1. I feel it is important to be able to find any information whenever I want online.				
2. I feel it is important to be able to access the Internet any time I want.				
3. I think it is important to keep up with the latest trends in technology.				
4. I get anxious when I don't have my cell phone.				
5. I get anxious when I don't have the Internet available to me.				
6. I am dependent on my technology.				

7. Technology will provide solutions to many of our problems.			
8. With technology anything is possible.			
9. I feel that I get more accomplished because of technology.			
10. New technology makes people waste too much time.			
11. New technology makes life more complicated.			
12. New technology makes people more isolated.			

People differ in the ways they act and think in different situations. This is a test to measure some of the ways in which you act and think. Read each statement and put a tick/cross in the appropriate box on the right side of this page. Do not spend too much time on any statement. Answer quickly and honestly.

	Rarely / Never	Occasi onally	Oft en	Almost always/ Always
1. I plan tasks carefully.				
2. I do things without thinking.				
3. I make-up my mind quickly.				
4. I am happy-go-lucky.				
5. I don't "pay attention."				
6. I have "racing" thoughts.				
7. I plan trips well ahead of time.				
8. I am self controlled.				
9. I concentrate easily.				
10. I save regularly.				

11. I "squirm" at plays or lectures.		
12. I am a careful thinker.		
13. I plan for job security.		
14. I say things without thinking.		
15. I like to think about complex problems.		
16. I change jobs.		
17. I act "on impulse."		
18. I get easily bored when solving thought problems.		
19. I act on the spur of the moment.		
20. I am a steady thinker.		
21. I change residences.		
22. I buy things on impulse.		
23. I can only think about one thing at a time.		
24. I change hobbies.		
25. I spend or charge more than I earn.		
26. I often have extraneous thoughts when thinking.		
27. I am more interested in the present than the future.		
28. I am restless at the theater or lectures.		
29. I like puzzles.		
30. I am future oriented		

Who's Following You?

Read each of the following statements carefully and indicate how characteristic it is of you according to the following scale:

	Not at all characteris tic of me	Slightly characteris tic of me	Moderately characteris tic of me	Very characteris tic of me	Extremely characterist ic of me
l. I worry about what other people will think of me even when I know it doesn't make any difference.					
 I am unconcerned even if I know people are forming an unfavorable impression of me. 					
3. I am frequently afraid of other people noticing my shortcomings.					
4. I rarely worry about what kind of impression I am making on someone.					
5. I am afraid others will not approve of me.					
6. I am afraid that people will find fault with me.					
7. Other people's opinions of me do not bother me.					
8. When I am talking to someone, I worry about what they may be thinking about me.					
9. I am usually worried about what kind of impression I make.					

10. If I know someone is judging me, it has little effect on me.			
11. Sometimes I think I am too concerned with what other people			
12. I often worry that I will say or do the wrong things.			

Please indicate how much you agree with each of the following statements:

	Strongly disagree	Dis agr ee	Neith er agree nor disag ree	Agree	Stron gly agree
1. My friends' emotions don't affect me much.					
2. After being with a friend who is sad about something, I usually feel sad.					
3. I can understand my friend's happiness when she/he does well at something.					
4. I get frightened when I watch characters in a good scary movie.					
5. I get caught up in other people's feelings easily.					
6. I find it hard to know when my friends are frightened.					
7. I don't become sad when I see other people crying.					
8. Other people's feeling don't bother me at all.					
9. When someone is feeling 'down' I can usually understand how they feel.					
10. I can usually work out when my friends are scared.					
11. I often become sad when watching sad things on TV or in films.					

12. I can often understand how people are feeling even before they tell me.		
13. Seeing a person who has been angered has no effect on my feelings.		
14. I can usually work out when people are cheerful.		
15. I tend to feel scared when I am with friends who are afraid.		
16. I can usually realize quickly when a friend is angry.		
17. I often get swept up in my friends' feelings.		
18. My friend's unhappiness doesn't make me feel anything.		
19. I am not usually aware of my friends' feelings.		
20. I have trouble figuring out when my friends are happy.		

Please indicate how much you agree with each of the following statements:

	Disagree strongly	Disa gree	Neithe r agree nor disagr ee	Agr ee	Agre e stron gly
1. It's not wise to tell your secrets.					
2. I like to use clever manipulation to get my way.					
3. Whatever it takes, you must get the important people on your side.					
4. Avoid direct conflict with others because they may be useful in the future.					
5. It's wise to keep track of information that you can use against people later.					
6. You should wait for the right time to get back at people.					
7. There are things you should hide from other people to preserve your reputation.					
8. Make sure your plans benefit yourself, not others.					
9. Most people can be manipulated.					
10. People see me as a natural leader.					
11. I hate being the center of attention.					
12. Many group activities tend to be dull without me.					
13. I know that I am special because everyone keeps telling me so.					

14. I like to get acquainted with important people.			
15. I feel embarrassed if someone compliments me.			
16. I have been compared to famous people.			
17. I am an average person.			
18. I insist on getting the respect I deserve.			
19. I like to get revenge on authorities.			
20. I avoid dangerous situations.			
21. Payback needs to be quick and nasty.			
22. People often say I'm out of control.			
23. It's true that I can be mean to others.			
24. People who mess with me always regret it.			
25. I have never gotten into trouble with the law.			
26. I enjoy having sex with people I hardly know			
27. I'll say anything to get what I want.			

Please answer every question choosing your response according to how strongly you agree or disagree with the statement by placing a cross 'x' in the appropriate circle. In selecting your response consider how you currently behave and not how you think you should behave. There are no better or worse responses

	Disagree	Agree
I seek out people to be with		
I want other people to decide what to do when we are		
I am totally honest with my close friends		
I want people to invite me to do things		
I am the dominant person when I am with people		
I want my close friends to tell me their real feelings		
I join social groups		
I want people to have a strong influence on my actions		
I confide in my close friends		
I want people to invite me to join their activities		
I get other people to do the things I want done		
I want my close friends to tell me about private matters		
I join social organisations		
I want people to control my actions		
I am more comfortable when people do not get too clos	e	
I want people to include me in their activities		

I have a strong influence on other people's actions I do not want my close friends to tell me about themselves I get myself included in informal social activities I want to be easily led by people People should keep their private feelings to themselves I want people to invite me to participate in their activities I take charge when I am with people socially I want my close friends to let me know their real feelings I include other people in my plans I want people to decide things for me There are some things I do not tell anyone I want people to include me in their social activities I get people to do things the way I want them to do I want my closest friends to keep secrets from me I have people around me I want people to have a strong influence on me There are some things I would not tell anyone I want people to ask me to participate in their discussions I take charge when I am with people

I want my friends to confide in me When people are doing things together I join them I want to be strongly influenced by what people say I have at least one friend to whom I can tell anything I want people to invite me to parties I have a strong influence on other people's ideas I want my close friends to keep their feelings a secret from me I look for people to be with I want other people to take charge when we work together There is a part of myself I keep private I want people to invite me to join them when we have free time I take charge when I work with people I want at least two of my friends to tell me their true feelings I participate in group activities I want people to cause me to change my mind I have close relationships with just a few people I want people to invite me to do things with them I see to it that people do things the way I want them done I want my friends to tell me about their private lives I want to seek out people to be with

Other people decide what to do when we are together I want to be totally honest with my close friends People invite me to do things I want to be the dominant person when I am with people My close friends tell me their real feelings I want to join social groups People have a strong influence on my actions I want to confide in my close friends People invite me to join their activities I want to get other people to do the things I want done My close friends tell me about private matters I want to join social organisations People control my actions I prefer it when people do not get too close emotionally People include me in their activities *I want to have a strong influence on other people's actions* My close friends do not tell me all about themselves I want to get myself included in informal social activities I am easily led by people I want people to keep their private feelings to themselves

People invite me to participate in their activities
I want to take charge when I am with people socially
My close friends let me know their real feelings
I want to include other people in my plans
People decide things for me
There are some things I do not want to tell anyone
People include me in their social activities
I want to get people to do things the way I want them done
My closest friends keep secrets from me
I want to have people around me
People have a strong influence on my ideas
There are some things I would not want to tell anyone
People ask me to participate in their discussions
I want to take charge when I am with people
My friends confide in me
When people are doing things together I want to join them
I am strongly influenced by what people say
I want to have at least one friend to whom I can tell anything
People invite me to parties
I want to have a strong influence on other people's ideas

My close friends keep their feelings a secret from me I want to look for people to be with Other people take charge when we work together I want to keep a part of myself private People invite me to join them when we have free time I want to take charge when I work with people At least two of my friends tell me their true feelings I want to participate in group activities People often cause me to change my mind I want to have close relationships with just a few people People invite me to do things with them I want to see to it that people do things the way I want them done My friends tell them about their private lives

Instructions: Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

	Strongly agree	Agree	Disagree	Strongly disagree
I. On the whole, I am satisfied with myself.				
2. At times I think I am no good at all.				
3. I feel that I have a number of good qualities.				
4. I am able to do things as well as most other people.				
5. I feel I do not have much to be proud of.				
5. I certainly feel useless at times.				
7. I feel that I'm a person of worth, at least on an equal plane with others.				
8. I wish I could have more respect for myself.				
P. All in all, I am inclined to feel that I am a failure.				
10. I take a positive attitude toward myself.				

re	nswer each question as honestly, and in as much detail, as you can. Remember that your esponses are confidential. If you have had more than one experience, then please answer he questions in relation to the occasion you feel was the most serious
1.	. Has anyone ever asked you to do something sexual through social media?
Yes	No
If ye	es, what did they do, or ask you to do (please tick all that apply)?
•	Asked you to share sexual images with them.
	Sent sexual images to you without you asking them to do so. Asked you to about sex, when they knew you didn't want to talk about sex. Asked you to perform a sexual act online (e.g. via webcam). Made sexually demeaning remarks. Shared intimate images of you (whether real or forged) Other (please describe)
Who	at relationship did you have with this person?
How	w did this experience make you feel?

The following questions relate to your negative experiences on social media. Please

2. Has anyone ever threatened or harassed you via social media?

Yes	No
ıj ye.	s, what did they do:
	Sent harassing images or videos which made me upset (e.g. of a violent or
distu	urbing nature).
	Sent me offensive messages privately through direct messaging etc. (i.e.
insu	lting you).
	Posted offensive comments for others to see on social media (i.e. on your
Face	ebook wall).
•	Commented on my posts in an offensive way
	Replied to comments I made on social media in an offensive or
three	atening way.
•	Made threatening statements (i.e. to do you harm in real life or to harm
some	eone you know).
•	Threatened to harm themselves if you did not engage with them.
	Tried to get other people to threaten or harass you.
	Other (please describe).
Wha	t relationship did you have with this person?

How did this experience make you feel?

Who's Followi	ring You?	
_		_
Has anyone	e ever tried to humiliate or embarrass you using social media?	
Yes	No	
If yes, v	what did that person do:	
	Posted embarrassing pictures or videos of you.	
-	d rumours about you.	
	ed your personal or contact information for others to see, withou	ut
your permis		
	ten embarrassing things on your social media accounts.	
	ed a page on social media about you, knowing it would upset you	
•	nation you have shared on social media to embarrass or humilic	ие
you.	nded to be you online and attempted to embarrass you with the	
	they have posted.	
-	raged you to share information and then spread that information	n.
through soc		
	ished images of you on embarrassing websites (i.e. pornographi	c
sites etc.).		
•	Other (please describe)	
What r	relationship did you have with this person?	

How did this experience make you feel?	
4. Has anyone attempted to control or manipulate you through social media?	
Yes No	
If yes, what did this person do?	
 Posted things to make you feel jealous or to taunt you. Monitored where you were and whom you were with. Told you who you can and can't communicate with on social media. Purposefully ignored your messages. Accessed your social media account(s) without your permission. Sent needy messages (e.g. repeated contact, requests for you to respond). Other (please describe) 	
What relationship did you have with this person?	
How did this experience make you feel?	

Who's Following You?

wno s r	ollowing You?			

Yes	No
l. Have you ever asked anyone	to do something sexual through social media?
f yes, what did you do:	
Asked them to share sex	rual images with you (i.e. "asked for nudes").
Sent sexual images to th	em, either of yourself or others, without a request
to do so.	
Spoke to them about sex	or sexual activity after they told you they don't
want to discuss it.	
Asked someone to perfor	m a sexual act online (e.g. via webcam).
Made sexually demeanin	g remarks.
	of someone else (whether real or forged)
Other (please describe)	
What relationship did you have	with this person?
What relationship did you have What were your reasons for do	

The following questions relate to your behaviour on social media. Please answer each question as honestly, and in as much detail, as you can. Remember that your responses are confidential. If you have had more than one experience, then please answer the questions in

2. Have you ever behaved in a way which could be perceived as harassment on social media?

Yes	No
Į	yes, what did you do:
	ent harassing images or videos to make someone else feel upset (e.g.
of a v	olent or disturbing nature).
	ent offensive messages privately through direct messaging etc. (i.e.
insuli	ing someone).
•	Posted offensive comments for others to see on social media (i.e.
Face	ook wall).
. (ommented on other's posts in an offensive way.
\cdot 1	eplied to comments someone made on social media in an offensive or
threa	ening way.
	Made threatening statements (i.e. to harm someone in real life or to
harm	someone they know).
•	Threatened to harm yourself if someone did not engage with them.
•	Tried to get other people to threaten or harass another person.
•	Other (please describe).
1	That relationship did you have with this person?
·	nai relationship ata you have with this person.
Ţ	That were your reasons for doing so?
3. Have	you ever tried to embarrass someone using social media?
17	
Yes	No

If yes, what did you do:

- *Posted embarrassing pictures or videos of someone else.*
 - · Spread rumors about someone which you knew were not true.
 - · Shared someone's personal or contact information for others to see, without their permission.
 - · Wrote embarrassing things on your/their/someone else's social media accounts.
 - · Created a page on social media about someone, knowing it would upset them.
 - · Used information someone has shared on social media to embarrass or humiliate them.
 - · Pretended to be someone else online and attempted to embarrass them with the information you have posted.
 - Encouraged someone to share information or secrets with you and then spread that information through social media.

pori	Published images of someone on embarrassing websites (i.e. rnographic sites etc.).	
	· Other (please describe)	

What relationship did you have with this person?

- · Intimate partner
- · Friend
- · Family member
- · Work colleague
- · Someone I met online
- · Someone who does not follow me on social media

	Other (please describe)
	What were your reasons for doing so?
4. Hav	ve you ever attempted to control or manipulate someone through social media?
Yes	No
	If yes, what did you do? Posted things to make them feel jealous or to taunt them. Monitored where they were and who they were with. Told them who they can and can't communicate with on social media. Purposefully ignored messages. Accessed their social media account(s) without permission. Sent needy messages (e.g. repeated contact, requests for them to respond). Other (please describe)
	What relationship did you have with this person?
	What were your reasons for doing so?

Appendix 4

Thank you for completing this survey. Your responses will be used to develop understanding about how online abuse takes place on social media. This is an under researched area and so your responses will improve knowledge within this area. If you have any questions about this project, you can contact the researchers at megan.kenny@hud.ac.uk (Megan Kenny), m.ioannou@hud.ac.uk (Dr Maria Ioannou, supervisor) and l.hammond@hud.ac.uk (Dr Laura Hammond, supervisor)

If any of the questions featured in the questionnaire have raised concerns and you would like further support, help is available from various organisations. If you are under 18, information about online abuse can be found at: https://www.nspcc.org.uk/preventing-abuse/child-abuse-and-neglect/online-abuse/

If you are over 18 and feel you have been the victim of a crime online support can be found at: https://www.victimsupport.org.uk/

Support can also be found at: http://www.samaritans.org/

If you are concerned about the actions of others online, you can report abusive content on social media. The location of this varies but all social media platforms have a feature for reporting online abuse. Your report will be anonymous and the person you report will not be informed that you have done so.

Appendix cont.

THE UNIVERSITY OF HUDDERSFIELD School of Human and Health Sciences – School Research Ethics Panel

PROPOSED REVISIONS TO PREVIOUSLY APPROVED APPLICATION

(Attach separate sheets as necessary)

Applicant Name: Megan Kenny

Title of previously approved study: Who's Following You? Online victimisation through social media.

Ref: SREP/2016/045_Rev1_290616

Date approved: 07/06/2016

(please also give details here if the title is to be revised):

Issue	Please clearly identify below revisions made to previously approved SREP application.							
Researcher(s) details	No changes							
Supervisor details	No changes							
Aim / objectives	The proposed changes will have no effect on the aims and objectives of this study.							

Methodology	There has been a change to two of the measures included in the survey. The brief fear of negative evaluation II scale will now be used, all questions are the same; however in the original BFNE measure 4 items were reverse scored. The BFNE II has reworded these and now no reverse scoring is required. The general consensus within existing research is that this version is clearer for participants and has greater reliability. The FIRO has been removed due to concerns about survey length and the Big Five Personality test has been used instead. The only impact these changes will have on the survey is that it takes less time to complete which will hopefully lead to increased participant retention.
Permissions for study	No effects anticipated.
Access to participants	The proposed changes will have no effect on access to participants.
Confidentiality	The proposed changes will not affect participant confidentiality.
Anonymity	The changes to the measures included will not affect anonymity.
Psychological support for participants	Details of online support services are included at the end of the survey, as are contact details for the research team.
Researcher safety / support (attach complete Universit Risk Analysis and Management form)	·

Information sheet	No changes have been made to the information sheet.
Consent form	See above.
Letters	N/A
Questionnaire	The FIRO and Brief Fear of Negative evaluation have been replaced with the Big Five Personality test and the Brief Fear of Negative Evaluation II. The FIRO contains 108 items, whereas the Big Five measure only contains 50 items, this means the overall survey length has decreased by 58 items, making it more manageable for participants to complete in a reasonable amount of time. The BFNE II has the same number of items.
Interview schedule	No anticipated effects. The survey can still go live on 1 st of July 2016 as planned.
Dissemination of results	No anticipated effects.
Other issues	N/A.
Where application is to be made to NHS Research Ethics Committee	N/A.
All documentation has been read by supervisor (where applicable)	My supervisor is aware of the changes and is happy to use the proposed alternative measures.

Who's F	Following You?	
Signed:		
Ü	(SREP Applicant – electronic signature acceptable)	
Date: _	29/06/2016	

Kt/SREP/SREP_RevisedApp(previously approved)/Oct-12

Appendix II

Table 15. Correlations between all variables and cybervictimisation (N = 370)

	1	2	2	4			7	0	9	10	11	10	12	1.4	1.5
	1	2	3	4	5	6	/	8	9	10	11	12	13	14	15
1. Age	-	0.014	-0.015	-0.001	-0.068	145**	-0.071	-0.101	.120*	.141**	.105*	.108*	.133*	.102*	-0.076
2. Gender	0.014	-	-0.033	-0.07	-0.068	-0.026	0.017	-0.036	0.038	0.07	-0.017	-0.004	0.011	-0.03	.118*
3. FNE	-0.015	-0.033	-	-0.055	-0.019	0.101	0.076	0.043	0.019	-0.079	-0.035	-0.079	0.043	-0.008	-0.013
4. Affective	-0.001	-0.07	-0.055	-	.712**	0.061	.256**	.116*	0.074	.219**	.134*	0.061	.196**	.331**	0.04
5. Cognitive6.	-0.068	-0.068	-0.019	.712**	-	.105*	.276**	.232**	-0.013	-0.082	-0.028	-0.025	-0.078	.162**	0.011
Machiavellianism	145**	-0.026	0.101	0.061	.105*	-	.570**	.643**	-0.065	-0.039	0.087	322**	.241**	.178**	.155**
7. Narcissism	-0.071	0.017	0.076	.256**	.276**	.570**	-	.582**	.408**	.129*	.131*	120*	.353**	.428**	.193**
8. Psychopathy	-0.101	-0.036	0.043	.116*	.232**	.643**	.582**	-	0.052	170**	-0.052	231**	0.087	0.09	.171**
9. Extraversion	.120*	0.038	0.019	0.074	-0.013	-0.065	.408**	0.052	-	.292**	.135**	.232**	.210**	.259**	0.063
10. Agreeableness11.	.141**	0.07	-0.079	.219**	-0.082	-0.039	.129*	170**	.292**	-	.282**	197**	.530**	.314**	0.032
Conscientiousness	.105*	-0.017	-0.035	.134*	-0.028	0.087	.131*	-0.052	.135**	.282**	-	0.074	.312**	.396**	-0.004
12. Neuroticism	.108*	-0.004	-0.079	0.061	-0.025	322**	120*	231**	.232**	197**	0.074	-	279**	.247**	122*
13. OTE	.133*	0.011	0.043	.196**	-0.078	.241**	.353**	0.087	.210**	.530**	.312**	279**	-	.367**	.180**
14. SES 15. Any	.102*	-0.03	-0.008	.331**	.162**	.178**	.428**	0.09	.259**	.314**	.396**	.247**	.367**	-	0.006
Victimisation	-0.076	.118*	-0.013	0.04	0.011	.155**	.193**	.171**	0.063	0.032	-0.004	122*	.180**	0.006	-

Appendix II cont.

Table 16. Correlations between variables included in the cybervictimisation model (N = 370)

Variables	1	2	3	4	5	6	7
1. Any victimisation	-						
2. Gender	118*	-					
	.155*						
3. Machiavellianism	*	026	_				
	.193*		ale ale				
4. Narcissism	*	.017	.570**	-			
	.171		**	.582*			
Psychopathy	**	036	.643**	4.	-		
	- *		-	- *	-		
6. Neuroticism	.122*	004	.322**	.120*	.231**	-	
	.180*		**	.353*		_ **	
7. OTE	~	.011	.241**	***	.087	.279**	

Appendix III

Table 17. Correlations between all variables and cyberperpetration (N = 370)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Age	1	0.014	-0.015	-0.001	-0.068	145**	-0.071	-0.101	.120*	.141**	.105*	.108*	.133*	.102*	104*
2. Gender	0.014	1	-0.033	-0.07	-0.068	-0.026	0.017	-0.036	0.038	0.07	-0.017	-0.004	0.011	-0.03	.174**
3. FNE	-0.015	-0.033	1	-0.055	-0.019	0.101	0.076	0.043	0.019	-0.079	-0.035	-0.079	0.043	-0.008	-0.002
4. Affective	-0.001	-0.07	-0.055	1	.712**	0.061	.256**	.116*	0.074	.219**	.134*	0.061	.196**	.331**	-0.023
5. Cognitive6.	-0.068	-0.068	-0.019	.712**	1	.105*	.276**	.232**	-0.013	-0.082	-0.028	-0.025	-0.078	.162**	-0.007
Machiavellianism	145**	-0.026	0.101	0.061	.105*	1	.570**	.643**	-0.065	-0.039	0.087	322**	.241**	.178**	0.062
7. Narcissism	-0.071	0.017	0.076	.256**	.276**	.570**	1	.582**	.408**	.129*	.131*	120*	.353**	.428**	.126*
8. Psychopathy	-0.101	-0.036	0.043	.116*	.232**	.643**	.582**	1	0.052	170**	-0.052	231**	0.087	0.09	.154**
9. Extraversion	.120*	0.038	0.019	0.074	-0.013	-0.065	.408**	0.052	1	.292**	.135**	.232**	.210**	.259**	0.033
10. Agreeableness 11.	.141**	0.07	-0.079	.219**	-0.082	-0.039	.129*	170**	.292**	1	.282**	197**	.530**	.314**	-0.079
Conscientiousness	.105*	-0.017	-0.035	.134*	-0.028	0.087	.131*	-0.052	.135**	.282**	1	0.074	.312**	.396**	139**
12. Neuroticism	.108*	-0.004	-0.079	0.061	-0.025	322**	120*	231**	.232**	197**	0.074	1	279**	.247**	-0.072
13. OTE	.133*	0.011	0.043	.196**	-0.078	.241**	.353**	0.087	.210**	.530**	.312**	279**	1	.367**	0.037
14. SES 15. Any	.102*	-0.03	-0.008	.331**	.162**	.178**	.428**	0.09	.259**	.314**	.396**	.247**	.367**	1	-0.01
Perpetration	104*	.174**	-0.002	-0.023	-0.007	0.062	.126*	.154**	0.033	-0.079	139**	-0.072	0.037	-0.01	1

Appendix III cont.

Table 18. Correlations between variables included in the cyberperpetration model (N = 370)

Variables	1	2	3	4	5	6
1. Any perpetration	-					
2. Gender	174^{*}	-				
	-					
3. Age	.104**	.014	-			
4. Narcissism	.126**	.017	071	-		
				$.582^{*}$		
5. Psychopathy	.154**	036	101	*	-	
6. Conscientiousness	.139**	017	$.105^{*}$.131*	052	-

Appendix IV

Table 19. Correlations between all variables and victimisation/perpetration (N = 370)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	-	0.014	-0.015	-0.001	-0.068	145**	-0.071	-0.101	.120*	.141**	.105*	.108*	.133*	.102*	117*
1. Age	0.014	_	-0.033	-0.07	-0.068	-0.026	0.017	-0.036	0.038	0.07	-0.017	-0.004	0.011	-0.03	.186**
2. Gender	0.014		0.033	0.07	0.000	0.020	0.017	0.030	0.030	0.07	0.017	0.004	0.011	0.03	.100
	-0.015	-0.033	-	-0.055	-0.019	0.101	0.076	0.043	0.019	-0.079	-0.035	-0.079	0.043	-0.008	-0.003
3. FNE	-0.001	-0.07	-0.055	_	.712**	0.061	.256**	.116*	0.074	.219**	.134*	0.061	.196**	.331**	0.001
4. Affective	0.001	0.07	0.033		.712	0.001	.230	.110	0.074	.21)	.154	0.001	.170	.551	0.001
	-0.068	-0.068	-0.019	.712**	-	.105*	.276**	.232**	-0.013	-0.082	-0.028	-0.025	-0.078	.162**	0.013
5. Cognitive	145**	-0.026	0.101	0.061	.105*	_	.570**	.643**	-0.065	-0.039	0.087	322**	.241**	.178**	0.097
6. Machiavellianism		0.020	0.101	0.001	.100			.0.0	0.000	0.009	0.007	.522	.2.1	.17.0	0.007
	-0.071	0.017	0.076	.256**	.276**	.570**	-	.582**	.408**	.129*	.131*	120*	.353**	.428**	.182**
7. Narcissism	-0.101	-0.036	0.043	.116*	.232**	.643**	.582**	_	0.052	170**	-0.052	231**	0.087	0.09	.193**
8. Psychopathy															
0.5	.120*	0.038	0.019	0.074	-0.013	-0.065	.408**	0.052	-	.292**	.135**	.232**	.210**	.259**	0.067
9. Extraversion	.141**	0.07	-0.079	.219**	-0.082	-0.039	.129*	170**	.292**	_	.282**	197**	.530**	.314**	-0.042
10. Agreeableness															
11. 0	.105*	-0.017	-0.035	.134*	-0.028	0.087	.131*	-0.052	.135**	.282**	-	0.074	.312**	.396**	108*
11. Conscientiousness	.108*	-0.004	-0.079	0.061	-0.025	322**	120*	231**	.232**	197**	0.074	_	279**	.247**	-0.083
12. Neuroticism															
12 OTF	.133*	0.011	0.043	.196**	-0.078	.241**	.353**	0.087	.210**	.530**	.312**	279**	-	.367**	0.073
13. OTE	.102*	-0.03	-0.008	.331**	.162**	.178**	.428**	0.09	.259**	.314**	.396**	.247**	.367**	-	0.018
14. SES															
16 37 at 1 at 7 a at	117*	.186**	-0.003	0.001	0.013	0.097	.182**	.193**	0.067	-0.042	108*	-0.083	0.073	0.018	-
15. Victimisation/perpetration															

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