

Digital harassment and abuse: Experiences of sexuality and gender minority adults

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Abstract

Digital harassment and abuse refers to a range of harmful, interpersonal behaviours experienced via the internet, as well as mobile phone and other electronic communication devices. While much existing research has focused on the experiences of children and young people (including foremost ‘cyberbullying’), there have been few international studies on adult experiences of digital harassment and abuse. As such, little is currently known about the extent, nature and impacts of digital harassment and abuse on adult victims. In particular, there exists a significant gap in current research into sexual, sexuality and gender based digital harassment and abuse. This article draws on findings from a larger research project in which we surveyed 2,956 Australian adults and 2,842 British adults (aged 18 to 54) about their experiences of technology-facilitated sexual violence (TFSV). The data presented here focus on the experiences of *sexuality diverse* adults ($n = 282$) who identified as lesbian, gay, bisexual or heterosexual, as well as *gender diverse* adults ($n = 90$), including women, men and transgender individuals. Results suggest that transgender individuals experienced higher rates of digital harassment and abuse overall, and higher rates of sexual, sexuality and gender-based harassment and abuse, as compared to heterosexual cisgender individuals. Implications of the findings are discussed with respect to policy, prevention, and future research.

Introduction

A key feature of contemporary digital society is the integration of communications and other digital technologies into everyday life, such that many of us are constantly ‘connected’ (Harwood et al., 2014). Yet the entangling of the social and the digital has particular implications for interpersonal relationships. Digital harassment and abuse refers to a range of harmful interpersonal behaviours experienced via the internet, as well as mobile phone and other electronic communication devices. These online behaviours include: offensive comments and name-calling, targeted harassment, verbal abuse and threats, as well as sexual, sexuality and gender-based harassment and abuse. Sexual, sexuality and gender-based harassment and abuse refers to *harmful and unwanted behaviours either of a sexual nature, or directed at a person on the basis of their sexuality or gender-identity*.

Though a variety of concepts and definitions are used in this field, much existing research has focused on cyberbullying and other behaviours experienced by children and young people. Comparatively, there have been few studies internationally that examine adult experiences of digital harassment and abuse. As such, little is currently known about the extent and nature of digital harassment and abuse as experienced by adult victims. Moreover, while the emerging literature has considered the differential experiences of digital harassment and abuse by gender, there exists a dearth of current research that is inclusive of the experiences of sexuality and gender minority adults in particular.

Previous research into experiences of hate-based abuse, violence and discrimination has identified that lesbian, gay, bisexual or transgender (LGBT)¹ individuals are

¹ Here ‘transgender’ refers to individuals whose gender identity or experience differs from the biological sex in which they were assigned at birth. The term includes individuals who were assigned male at birth but who identify as female, individuals who were assigned female at birth but who identify as male, as well as individuals who fall outside the binary categories of female and male (e.g. ‘non-binary’ and ‘genderqueer’) (see Bocking, 2008; 2014). Increasingly the broader acronym LGBTIQ (lesbian, gay, bisexual, transgender, intersex, queer) is used to include individuals who identify as intersex, gender-queer, and/or gender non-binary. Our study asked participants to select either transgender or another specified gender, yet as very few elected to specify another gender, we use the acronym LGBT throughout this article.

disproportionately victimised.² Studies into discriminatory and hate-based violence in both Australia and the UK have found that sexuality and gender minority individuals experience high rates of intrusive behaviour, verbal abuse, threats, as well as physical and sexual assault (see Guasp et al., 2013; Hillier et al., 2005; Rothman et al., 2011; Sheridan et al., 2016; Sterzing et al., 2017). This victimisation is in turn associated with poor mental health and wellbeing, particularly for youth populations who are at higher risk of self-harm and suicide (Collier et al., 2013; Couch et al., 2007; Dragowski et al., 2011; Johnson et al., 2007; Nuttbrock et al., 2010; Perez-Brumer et al., 2015). The high levels of hate-based abuse, violence and discrimination experienced by LGBT individuals, and its associated impacts, highlights the importance of including these groups in emerging research into technology-facilitated abuse.

This article draws on findings from a larger research project in which we surveyed Australian and British adults about their experiences of technology-facilitated sexual violence (TFSV) (see [Removed for Review]). The data presented here focus on the experiences of a subset of lesbian, gay, bisexual or transgender participants. In the first section of the article we provide a brief summary of key literature addressing digital harassment and abuse, including sexual violence as well as gender- and sexuality-based harassment and abuse. Second, we report on our method, including details of our sample matching method for comparative analyses of LGBT and heterosexual, cisgender³ participants, as well as the key

² We acknowledge that terminology with respect to both sexuality and gender diversity is important and often contested with different terminology preferred by different groups within the broader community and at different times. Though we have used the term LGBT throughout this article, there is some variation in other studies which have referred to other terms or specific sub-groups. We also acknowledge that there is not a homogenous LGBT 'community', but rather a diversity of individuals with different sexual orientations, as well as experiences of gender and/or gender-identity. We have sought, where sufficient data allows, to differentiate the experiences of sub-groups, although we recognise that this is difficult, particularly for transgender individuals.

³ *Cisgender* is a term used to identify individuals whose experience and/or expression of their gender aligns with that assigned at their birth. Though not consistently used in research, and a contested concept, we choose to use it here both to more clearly differentiate between sub-groups of our study participants, and to contribute to the de-centring of hetero- and gender-normativity (see Cava, 2016).

results from these analyses. Finally, we discuss the implications of the study findings for policy, prevention and future research.

Concepts and definitions

As briefly noted above, digital harassment and abuse is an umbrella term referring to a range of harmful interpersonal behaviours experienced via a range of online platforms, as well as mobile phone and other electronic communication devices (including tablets and online gaming consoles). We have written at length previously about the concept and definition of different types of digital harassment and abuse, which can include both non-criminal and criminal behaviours ([Removed for Review]). Examples of non-criminal behaviours include name-calling, offensive language and sexual harassment, while criminal behaviours can include image-based sexual abuse (e.g. taking, distributing or threatening to distribute nude or sexual images without consent, which is increasingly criminalised in many jurisdictions globally, see [Removed for Review]), threats of physical harm, and cyberstalking. Whether criminal or non-criminal, many victims of digital abuse and harassment will experience harm as a result of their experiences, where ‘harm’ is defined as significant emotional distress or physical injury or impairment. While we acknowledge that digital harassment and abuse does not always result in injury or suffering to targets of harassment and abuse, it is important to note that ‘harm’ can also refer to broader societal norms, values and attitudes.

In Table 1 we present an expansive list of common concepts and definitions of subtypes of digital harassment and abuse as described in the existing literature. As is evident in the table, although there are some commonalities across definitions adopted, many differ with regard to their specificity as against their generality. For example, while some simply define aggressive or harassing behaviours that occur online or via mobile phones, others are

more specific in terms of the range of behaviours constituting different forms of bullying, harassment and/or abuse. Such definitions carry implications for measurement and comparability across studies, making it particularly important for researchers to clearly demarcate where their own concepts, definitions and empirical contributions sit with respect to the broader field.

---Table 1 about here---

It is also noteworthy that, to date, much existing research has focused on the experiences of children and young people with a focus on cyberbullying. The overwhelming interest in children and youth experiences of cyberbullying may be in part driven by their relative vulnerability, as well as a number of high-profile and tragic cases in which young people have taken their own lives following targeted harassment and abuse online (Bailey, 2014; Dodge, 2016; Powell, 2015). Though cyberbullying has been used in some studies to refer to adult experiences of online abuse, particularly among college samples (e.g. Cowie and Myers, 2015; Faucher et al., 2014), different terms and definitions are often used, making comparative assessment of the extant literature difficult. Arguably, in adult contexts, the term ‘cyberbullying’ may have the further effect of minimising the harms experienced by victims, particularly when such behaviours cross-over into stalking and/or domestic abuse situations. Moreover, the term cyberbullying is not without criticism even in the specific context of children and young people’s experiences. For example, Canadian legal scholar Jane Bailey (2014) has identified the problematic ways in which media, policy and law reform have re-framed sexual assaults of young women and girls, as well as the subsequent distribution of images of sexual assault of survivors, as cyberbullying. Bailey argues that labelling sexual and gendered violence under the more generic term of cyberbullying has the effect of both

minimising the violence and obscuring the specificity of sexual violence as compared with other non-sexual harms experienced by young people.

Some scholars (e.g. Finkelhor et al., 2000; Wolak et al., 2007) have advocated reserving cyberbullying to refer to behaviours experienced specifically by young people, thus distinguishing cyberbullying as a subset of wider behaviours constituting online harassment. Online harassment, Finkelhor et al. (2000: x) suggest, can be defined as ‘threats or other offensive behavior (not sexual solicitation) sent online... or posted online...’. Online harassment can be further distinguished from cyberstalking, a term which, though variably used, typically refers to a narrower legislative definition of repeated and unwanted contact that causes a victim to feel fearful (see Henry and Powell, 2016 for a discussion). Indeed, some scholars advocate that the term cyberstalking be reserved for its legal definition requiring repeated behaviours that cause fear for one’s personal safety and that alternative terms be used to name ‘less severe methods of online pursuit’ that may or may not escalate to cyberstalking (Dreßing et al., 2014: 65; see also Henry and Powell, 2016). Spitzberg and Hoobler (2002), for instance, suggest that the term ‘cyber-obsessional pursuit’ (COP) might better describe repeated and unwanted behaviours that do not meet legal thresholds of threats to, or fear of threat to, personal safety.

In recent years research in the social sciences has increasingly moved away from the prefixes of ‘internet’, ‘cyber’ or ‘online’, as these terms refer to a somewhat limited view of online space as though it were a distinct realm of experience, while at the same time potentially excluding other communications and digital technologies. By contrast, contemporary research has sought to understand digital technologies as increasingly embedded in a variety of ways into everyday life, and include a broader set of technologies than the internet or ‘cyberspace’ in isolation (see Stratton et al., 2017). Bluetooth connections between devices, for example, might also be used to send harassing, threatening and/or

offensive content to individuals. Likewise, location-based technologies such as Global Positioning Systems (GPS) and radio-frequency identification (RFID) may be used in harassment and/or stalking contexts. In short, there are a wider array of digital technologies that can potentially be used to facilitate harassment and abuse beyond the internet.

The shift towards recognising a broader range of technologies in the perpetration of harms is also reflected in an emerging number of studies that adopt the terminology of ‘technology-facilitated’ forms of harassment and/or abuse. For example, in the Australian context, Delanie Woodlock (2013; 2016) refers to ‘technology-facilitated stalking’ to describe unwanted and repeated contact via a range of technologies which cause an individual to feel fearful. Similarly, Anastasia Powell and Nicola Henry (2016; 2017; Henry and Powell, 2014; 2015; 2016) use the term ‘technology-facilitated sexual violence’ (TFSV) (discussed further below) to describe a range of sexually harmful behaviours in which the internet and/or other digital communications technologies are used. Powell and Henry (2016; 2017) argue that TFSV can be understood as sexually-based harms within a wider context of digital harassment and abuse.

A number of subfields have emerged in the social sciences that seek to account for the integration of digital technologies in various ways and with implications for everyday life (as in ‘digital sociology’, see Lupton, 2014; Marres, 2017); and everyday crimes (as in ‘digital criminology’, see Smith et al., 2017; Stratton et al., 2017). Digital criminology, as argued by Stratton et al. (2017), suggests a need to expand beyond the relatively siloed foci of conventional ‘cyber’ crime. Not only do they suggest that much criminological research has perpetuated problematic dualisms between ‘cyber’ and ‘real’ crimes, but that few cyber criminological studies intersect with critical criminological concerns regarding inequalities as they relate to crime perpetration, victimisation and the state. In particular, Stratton et al. (2017) argue that there has been a comparative neglect in cybercrime research on the impact

of structural inequalities on crime and justice that persist in a digital society, as well as the victimisation experiences of marginalised communities. Drawing together these developments both in criminology and in social sciences more broadly, we use the umbrella concept of *digital harassment and abuse* here both to acknowledge a wider array of technologies that may be used in harassment and abuse, and to align ourselves with an emerging field of digital criminological scholarship that seeks to include the victimisation experiences of marginalised communities.

Prevalence of digital harassment and abuse

A small but growing number of international studies have sought to measure the extent of digital harassment and abuse among adult populations. In the United States, for example, a survey of 2,849 adult internet users found that overall 40% had experienced some kind of digital harassment or abuse. The rates were similar for men and women, but much higher for young adults, with 70% of those aged 18 to 24 years reporting experiencing at least one form of digital abuse (Pew Research Center, 2014). Further studies have investigated rates of cyberstalking, predominantly in the United States and largely among college student populations. For instance, a study by Reyns et al. (2012) reported that up to 41% of college students have been a victim of cyberstalking in the past. Some research indicates that women were more likely than men to perpetrate cyberstalking (Alexy et al., 2005) and that men report more online victimisation than women (Bennett et al., 2011). Other studies claim that gendered patterns in cyberstalking are more aligned with sexual violence and harassment generally. For example, in one study, Reyns et al. (2012) found some gender differences with 46.3% of females in their sample of college students ($n = 974$) reporting cyberstalking victimisation compared to 32.1% of males.

Some studies have further sought to investigate different forms of online sexual

harassment. For example, a study by Baumgartner et al. (2010: 439) focused specifically on online sexual solicitation, which they defined as ‘receiving unwanted requests to talk about sex or do something sexual’. In their sample of Dutch adults ($n = 1,026$) they found that only 4.6% of men and 6.7% of women had been sexually solicited online in the past six months. This was compared to 5.6% of male adolescents and 19.1% of female adolescents who had been sexually solicited online in the past six months. Similarly, in an Australian survey of adults aged 18 to 54, Powell and Henry (2016) reported that significantly more females (21.8%) than males (17.7%) surveyed experienced online sexual harassment, further suggesting some gender differences in relation to sexually-based forms of digital harassment and abuse.

To date, much of the empirical research on online sexual behaviour has been focused on ‘sexting’ among children and adolescents (see e.g. Crofts et al., 2015; Mitchell et al., 2012). Some focus, however, has been on ‘coercive’ or ‘non-consensual’ sexting. For instance, in a US study of 480 undergraduate students, Drouin et al. (2015) found that one in five respondents had been coerced into sexting. They found that ‘sexting coercion victimisation’ was common among both men and women, and that such individuals were more likely to experience traditional forms of intimate partner violence (see also Drouin and Tobin, 2014; Englander, 2015). Non-consensual sexting, or ‘image-based sexual abuse’, which refers to the non-consensual taking or distribution (including threats to distribute) of nude or sexual images, has also received some attention in the scholarly literature to date. A small number of quantitative studies, for instance, have examined perpetrator or bystander behaviours, such as Garcia et al.’s (2015) study of US adults aged between 21 and 75 ($n = 5,805$), which found that 22.9% of respondents who had received a sexually explicit text message had shared the image with others. Other similar studies found lower rates of perpetration (see Gámez-Guadix et al., 2015; Morelli et al., 2016; Thompson and Morrison,

2013), although these included a smaller number of questions relating to perpetration alone.

Research on victimisation of image-based sexual abuse include Powell and Henry's (2016; 2017) Australian study on TFSV ($n = 2,956$), which found that 9.3% of participants (aged 18 to 54 years) reported that a nude or semi-nude image of them had been distributed without their permission. They also found that 10.7% said that someone had taken a nude or semi-nude image of them without their consent, and that 9.6% had reported that someone had threatened to distribute or share a nude or semi-nude image of them. Other studies have found similar victimisation rates. For example, Branch et al. (2017) in their study of 470 US college students found that 10.5% of students reported having a private photo shared of them beyond the intended recipient. Similarly, Dir and Cyders (2015) found ($n = 611$) that 12% of university students surveyed reported that someone had shared a sext of them without their consent. By way of contrast, in a nationally representative survey of 3,002 US residents aged 15 years and over, Lenhart et al. (2016) found comparatively low rates of victimisation, with only 3% saying that someone had threatened to post nude or nearly nude photos or videos of them to hurt or embarrass them, and 2% reporting someone had posted a photo of them online without their permission.

A growing literature has also identified the cumulative impacts of victimisation of four or more different types of violence or abuse (Finkelhor et al., 2007; Hamby and Grych, 2012; Mitchell et al., 2007; Scott-Storey, 2011; Sterzing et al., 2017). Though studies vary in the terminology, definitions and measurement, *polyvictimisation* (Finkelhor et al., 2007; Sabina and Strauss, 2008) has been used to refer to individuals who have experienced multiple victimisation across different subtypes of violence or abuse. Polyvictimisation is furthermore correlated with poor mental health and wellbeing impacts associated with the exposure of an individual to multiple categories of victimisation (Finkelhor et al., 2007). Though there is little research examining the health impacts of polyvictimisation in relation

to sexuality and gender minority groups specifically, some studies demonstrate compounding emotional and behavioural impacts of hate crimes for LGBT people. Transgender people in particular experience greater levels of threat, vulnerability and anxiety compared to non-transgender LGB people (see Myers et al., 2017; Walters et al., 2017).

Experiences of sexuality and gender minority groups

While empirical research into adult experiences of digital harassment and abuse is still emerging, there are even fewer studies that have examined the specific experiences of LGBT adults. Though representing a minority within the general population (see Australian Bureau of Statistics, 2014; Office for National Statistics, 2016), LGBT individuals experience disproportionately high rates of discrimination, marginalisation, harassment, abuse and violence (as discussed above). Emerging research suggests that similar patterns of harassment and abuse may extend, perhaps unsurprisingly, into online and other digital communications.

A small number of previous studies have found higher rates of digital harassment and abuse amongst sexuality minority people as compared with heterosexual people. For example, a 2013 report on homophobic hate crime in the UK found that 1 in 20 of the 2,544 LGB participants surveyed had been the target of homophobic abuse or behaviour online in the previous 12 months alone, with higher rates of abuse (7%) experienced by those aged 18 to 24 years (Guasp et al., 2013). Finn's (2004) study examined prevalence in different sexuality groups, finding that approximately one third of LGBT students reported getting a harassing email from someone they did not know, or barely knew, compared to only 14.6% of heterosexual students. This is not a significant finding, given only 16 students identified as LGBT, yet it is important that further investigation be undertaken in relation to digital abuse against sexual minorities. In another study of 1,182 participants aged between 13 and 25, Myers et al. (2017) found that bisexual, pansexual or queer participants experienced more

cyberbullying victimisation compared to both heterosexual or gay and lesbian participants, and that sexual minority participants reported victimisation through significantly more electronic sources.

Fewer quantitative studies have examined the experiences of transgender, intersex and non-binary gender individuals of digital abuse (see Myers et al., 2017). This can be partly understood to the extent that these communities represent a very small proportion of the general population (approximately 0.05%). As such, recruiting sufficient numbers for comparative analyses, even in relatively large samples, is difficult and these groups are often excluded from subsequent analyses (Lund and Ross, 2016). Yet there also exist critiques of hetero- and gender-normativity in harassment, abuse and sexual violence research. For instance, Easpaig and Fryer (2011: 168) note that much ‘mainstream...sexual violence research has been constructed and maintained which serves the interests of heterosexism and cisgenderism’. They claim that much research in the field fails to identify the ‘power, privileges, subjectivity and intersections’ that exist between gender and sexual identities which, in turn, are too often othered and exoticised when they are (rarely) discussed in sexual violence research (Easpaig and Fryer, 2011: 168). Leonard et al. (2008) have likewise noted that where research exists into the experiences of gender minority people, it is often specific to violence and harassment directed at their ‘gender-identity’, rather than a more holistic account of the ‘everyday’ abuse individuals experience (see also Fileborn, 2012).

Further critiques and limitations of ‘hate speech’ research have also been identified in the broader criminological literature (see Williams and Tregidga, 2014 for a discussion). In short, some scholars recognise that while some harassment and abuse may well be *overtly* based on the actual or perceived sexuality and/or gender-identity of the victim, other acts may not be explicitly targeted towards a victim’s gender or sexual identity. Nonetheless, these acts may disproportionately affect minorities, and therefore are not wholly unrelated to ‘defined

characteristics' such as disability, race/ethnicity, religion, sexuality and transgender status and/or gender identity (see Leonard et al., 2008). Unfortunately, existing research into experiences of hate-based violence and abuse often narrowly requires participants to report incidences that were specifically based on their sexuality and/or gender identity, while at the same time general surveys of violence and abuse rarely report on intersecting inequalities particularly in relation to gender-identity (Easpaign and Fryer, 2011; Fileborn, 2012).

Finally, it is worth noting that a 2013 US Pew Research Centre (2013) survey found that just 43% of LGBT participants reported that they had revealed their sexual orientation and/or gender identity on an online social networking site, and only 16% said that they regularly discussed LGBT issues online. This suggests that for many LGBT people online spaces such as social networking sites may be experienced as exclusionary and/or unsafe places in which to freely express themselves. Yet, online spaces and digital communications tools are frequently identified as providing a number of positive functions for LGBT individuals, such as 'expressing, constructing, and managing identity, self-disclosure of negative experiences such as bullying, facilitating the coming out process, social activism ... relationship processes, including identifying romantic and sexual partners, establishing social capital, and receiving social support' (Fox and Ralston, 2016: 636; see also Albury and Byron, 2016).

The present study

This article draws on findings from a larger research project in which we surveyed Australian and British adults about their experiences of digital harassment and abuse (see [Removed for Review]). This larger project sought to investigate five subtypes of digital harassment and abuse: *digital harassment* (offensive comments and name-calling), *digital sexual harassment* (unwanted sexual comments and/or sexual requests), *image-based sexual*

abuse (creating, distributing or threatening to distribute a nude or sexual image), *sexual aggression and/or coercion* (sexual threats, and forced sex acts), as well as gender/sexuality-based harassment (offensive comments, threats, or other harassment directed at an individual's gender or sexuality identity). While the development of this typology and overall findings for the Australian sample have been published previously ([Removed for Review]), here, we report for the first time on the experiences of a subset of lesbian, gay, bisexual and transgender participants across both the Australian and British samples. The present research thus examines sexuality diverse and gender diverse adults' lifetime prevalence of 26 behaviours associated with the five subtypes of digital harassment and abuse established in our prior research: digital harassment, digital sexual harassment, image-based sexual abuse, sexual aggression and/or coercion, and gender/sexuality-based harassment. Three sets of comparisons are reported between: 1) sexuality minority women (gay/lesbian and bisexual) and heterosexual women, 2) sexuality minority men (gay and bisexual) and heterosexual men, and 3) gender minority women and men (transgender), heterosexual women and heterosexual men. In the following section we briefly report on the method of the larger study from which this article is derived, as well as the specific sample and analyses that are reported in this article.

Method

Recruitment and participants

The present research used data collected by the *Tech&Me: Survey of Social Experiences Online* (see [Removed for Review]), received University Human Research Ethics Committee approval, and was conducted in accordance with The Australian Code of the Responsible Conduct of Research. The target populations were Australian and British adults aged 18 to 54 years, who were recruited via an online panel provider (Research Now,

www.researchnow.com.au). Recruitment invitations were sent to 30,732 Australian and 32,604 British members of the community who met the target sample criteria and resulted in initial samples of 3,963 and 3,914 adults respectively. The response rates were approximately 13% and 12%, which are not unusual when sampling members of the community (see Riggle et al., 2005; Shih and Fan, 2008). The final samples, excluding screen-outs and incomplete responses, comprised: 2,956 Australian adults (1,481 women, 1,451 men, 16 transgender and 8 other) and 2,842 British adults (1,364 women, 1,455 men, 14 transgender and 9 other). Two separate matched samples were then created from these final samples for the present research: one comprising 282 sexuality diverse adults and one comprising 90 gender diverse adults.

Sexuality diverse adults

The sample of sexuality diverse adults comprised sexuality minority and heterosexual adults: 141 women including 47 gay/lesbian, 47 bisexual, and 47 heterosexual female participants, and 141 men including 47 gay, 47 bisexual and 47 heterosexual male participants. The sub-samples were matched (where possible) on the basis of five demographic characteristics: country (Australia, UK), age (19 and under, 20-29, 30-39, 40-49, 50 and over), relationship status (single, married/defacto, other), education status (secondary, tertiary), and employment status (employed/volunteer, stay-at-home/unemployed, student).

Gender diverse adults

The sample of gender diverse adults comprised gender minority and heterosexual adults: 30 women, 30 men and 30 transgender participants. Again, the sub-samples were matched where possible on the basis of five demographic characteristics: country, age,

relationship status, education status and employment status. Demographic characteristics for the matched samples of sexuality diverse and gender diverse adults are presented in Table 2.

---Table 2 about here---

Measures

The survey explored the nature, scope and impact of positive and negative social experiences online and via other communications technologies, such as mobile phones, tablets and gaming devices. Although the recruitment materials acknowledged that the survey would ask questions about participants' experiences of negative, harassing and abusive behaviours (including questions relating to sexually based harms), it did not identify the research as focusing on 'online sexual violence and harassment' to reduce the potential recruitment bias. The survey comprised five parts: 1) technology use, 2) negative online behaviours, 3) TFSV victimisation scale, 4) most recent TFSV experience, and 5) nature and impact of TFSV experience (see [Removed for Review]).

The present research examined the lifetime prevalence of five subtypes of digital harassment and abuse: digital harassment (seven behaviours), digital sexual harassment (five behaviours), image-based sexual abuse (three behaviours), sexual aggression and/or coercion (five behaviours), and gender/sexuality-based harassment (six behaviours; see [Removed for Review] for discussion of the conceptual framework). In all instances, participants were asked to select one of two options ('never', 'at least once') to indicate how often they had personally experienced each of the behaviours either online or via other electronic devices.

Data analysis

Three sets of data analysis compared sexuality diverse and gender diverse adults' experiences of digital harassment and abuse (sexuality diverse women, sexuality diverse men,

and gender diverse adults) using IBM SPSS Statistics Version 23. Each set of data analysis comprised a series of chi-square tests of independence (χ^2), with Cramer's V (ϕ_c) as a measure of effect size, to examine the lifetime prevalence of 26 behaviours associated with the five subtypes of digital harassment and abuse. Analyses were performed for the 26 behaviours rather than the five subtypes of digital harassment and abuse because there is a significant gap in current research. As Cavezza and McEwan (2014) highlighted in the context of cyberstalking, in these instances it is important to report all possible associations to inform future research. Bonferroni corrected alpha values were used to reduce the risk of Type I errors associated with multiple testing: .007 for digital harassment, .010 for digital sexual harassment, .016 for image-based sexual abuse, .010 for sexual aggression and/or coercion and, .008 for gender/sexuality-based harassment. Additional chi-square tests of independence compared sexuality diverse and gender diverse adults' experiences of polyvictimisation (i.e. having experienced four or more different subtypes of digital harassment and abuse).

Results

Sexuality diverse women

The overall pattern of findings presented in Table 3 shows that bisexual women were more likely to experience digital harassment and abuse than gay/lesbian or heterosexual women. Bisexual women were most likely to experience 13 of the 26 behaviours, compared to gay/lesbian women who were most likely to experience five behaviours and heterosexual women who were most likely to experience three behaviours. However, a series of chi-square analyses with Bonferroni corrected alpha values revealed no significant differences in lifetime prevalence for any of the five subtypes of digital harassment and abuse according to sexuality diversity.

---Table 3 about here---

With regard to polyvictimisation, there was no significant difference in the proportion of gay/lesbian (19.1%), bisexual (17.0%), or heterosexual (12.8%) women who experienced four or more different subtypes of digital harassment and abuse, $\chi^2(2, n = 141) = 0.73, p = .695, \phi_c = .07$.

Sexuality diverse men

The overall pattern of findings presented in Table 4 shows that bisexual men were more likely to experience digital harassment and abuse than gay or heterosexual men. Bisexual men were most likely to experience 21 of the 26 behaviours, compared to gay men who were most likely to experience two behaviours and heterosexual men who were not most likely to experience any behaviours. A series of chi-square analyses with Bonferroni corrected alpha values revealed three significant differences, one relating to the lifetime prevalence of digital harassment, one to the lifetime prevalence of digital sexual harassment, and one to the lifetime prevalence of gender/sexuality-based harassment.

---Table 4 about here---

Digital harassment. Bisexual men (55.3%) were more likely to report having experienced someone harassing them for a sustained period of time than gay (19.1%) or heterosexual (21.3%) men, $\chi^2(2, n = 141) = 17.82, p < .001, \phi_c = .36$.

Digital sexual harassment. Bisexual men (31.9%) were more likely to report having experienced someone sexually harassing them than gay (10.6%) or heterosexual (8.5%) men, $\chi^2(2, n = 141) = 11.15, p = .004, \phi_c = .28$.

Gender/sexuality-based harassment. Gay (36.2%) or bisexual (42.6%) men were more likely to report having experienced someone posting offensive and/or degrading messages about their sexuality or sexual identity than heterosexual (10.6%) men, $\chi^2(2, n = 141) = 12.82, p = .002, \phi_c = .30$.

With regard to polyvictimisation, there was no significant difference in the proportion of men who identified as gay/lesbian (23.4%), bisexual (31.9%), or heterosexual (17.0%) who experienced four or more different subtypes of digital harassment and abuse, $\chi^2(2, n = 141) = 2.87, p = .238, \phi_c = .14$.

Gender diverse adults

The overall pattern of findings presented in Table 5 shows that transgender participants were more likely to experience digital harassment and abuse than female or male participants. Transgender participants were most likely to experience 25 of the 26 behaviours, compared to female and male participants who were not most likely to experience any behaviours. A series of chi-square analyses with Bonferroni corrected alpha values revealed eight significant differences, four relating to the lifetime prevalence of digital harassment, one to the lifetime prevalence of digital sexual harassment, and three to the lifetime prevalence of gender/sexuality-based harassment.

---Table 5 about here---

Digital harassment. Transgender participants (66.7%) were more likely to report having experienced someone spreading rumours or lies about them than female (13.3%) or male (16.7%) participants, $\chi^2(2, n = 90) = 22.52, p < .001, \phi_c = .52$. Transgender participants (all 63.3%) were also more likely to report having experienced someone threatening to

physically harm them, someone harassing them for a sustained period, and someone sharing embarrassing details about them than female (10.0%, 13.3% and 23.3% respectively) or male (23.3%, 13.3% and 20.0% respectively) participants, $\chi^2(2, n = 90) = 21.16, p < .001, \phi_c = .49$, $\chi^2(2, n = 90) = 23.81, p < .001, \phi_c = .51$, and $\chi^2(2, n = 90) = 15.23, p < .001, \phi_c = .41$.

Digital sexual harassment. Transgender participants (56.7%) were more likely to report having experienced someone sexually harassing them than female (0.0%) or male (6.7%) participants, $\chi^2(2, n = 90) = 34.56, p < .001, \phi_c = .62$.

Gender/sexuality-based harassment. Transgender participants were more likely to report having experienced someone post offensive and/or offensive messages about their gender (60.0%), someone post offensive and/or degrading messages about their sexuality (63.3%), and someone describing or visually representing an unwanted sexual act against their avatar or game character (33.3%) compared to female (3.3%, 3.3% and 3.3% respectively) or male (6.7%, 6.7% and 13.3% respectively) participants, $\chi^2(2, n = 90) = 33.91, p < .001, \phi_c = .61$, $\chi^2(2, n = 90) = 36.94, p < .001, \phi_c = .64$, and $\chi^2(2, n = 90) = 10.08, p = .006, \phi_c = .34$.

With regard to polyvictimisation, there was a significant difference in the proportion of female, male and transgender participants who experienced four or more different subtypes of digital harassment and abuse, $\chi^2(2, n = 90) = 9.77, p = .008, \phi_c = .33$. Male (20.0%) and transgender (40.0%) participants were more likely to experience polyvictimisation than female (6.7%) participants.

Discussion and implications

The present research examined sexuality diverse and gender diverse adults' lifetime prevalence of 26 behaviours associated with five subtypes of digital harassment and abuse. Overall we found that the lifetime prevalence of digital harassment and abuse victimisation

for sexuality minority women was not significantly different from heterosexual women, although bisexual women were most likely to experience 13 of the 26 behaviours. There were no significant differences in polyvictimisation for these participants. Meanwhile, lifetime prevalence of digital harassment and abuse victimisation for bisexual men was significantly higher for 3 of the 26 behaviours, and bisexual men were most likely to experience 21 of the 26 behaviours. Again, there were no significant differences in polyvictimisation for these participants.

This study found that the lifetime prevalence of digital harassment and abuse victimisation for transgender participants was significantly higher for 8 of the 26 behaviours compared with cisgender heterosexual participants. Transgender participants were most likely to experience 25 of the 26 behaviours, and as such they were also significantly more likely to experience polyvictimisation as compared with cisgender heterosexual participants.

Few previous studies on digital harassment and abuse have reported on the experiences of sexuality and gender minority adults. This gap in current research can be understood partly because of low numbers of transgender participants, but also because of hetero- and gender-normativity that dominates much existing research on harassment, discrimination and violence (see Cava, 2016). Indeed, some studies do not ask participants whether they identify as transgender. Furthermore, in the wider sexual violence, harassment and abuse literature, experiences of LGBT people are often reported only as they relate to homophobic or transphobic hate crime; that is, harms that are understood by participants to have been specifically directed at their sexuality and/or gender identity. However the findings reported here indicate an increased risk of victimisation for LGB individuals, and more particularly for transgender individuals, across a range of digital harassment and abuse behaviours. As such, this study highlights the importance of research that seeks both to include sexuality and gender minority individuals, as well as distinguish between the

experiences of sexuality minority as compared with gender minority individuals. The present study thus goes some way towards addressing the current gaps in the empirical literature.

In many ways the results of this study are unsurprising given the high rates of polyvictimisation among sexuality and gender diverse populations in general. Given that LGBT individuals are more likely to exhibit symptoms of emotional distress, such as depression, anxiety and suicidal ideation, it is likely that experiences of digital abuse and harassment will exacerbate such symptoms, notwithstanding the positive benefits of digital communications technologies impart for identity, expression and community for sexuality and gender diverse individuals. It is thus vital that responses and prevention efforts be tailored to adequately address the needs of this heterogeneous population. First, counsellors and other victim support advocates need to be trained and sensitised to the nature and scope of digital abuse and harassment against sexuality and gender diverse individuals, as well the psychological, social and physical impacts of victimisation (including sexual violence, substance abuse, prostitution and homelessness).

Second, improved police training, resources, responses and relationships are likewise crucial for responding to the problems of homophobia and transphobia (see Dwyer, 2011), including when it is manifested in an online context. There are a number of challenges for police in responding to digital harassment and abuse, including lack of resources to conduct forensic investigations, absence of applicable criminal laws, cross-jurisdictional issues (e.g. where the perpetrator is located in an entirely different jurisdiction to the victim) and in some circumstances, low appreciation of the impacts of online abuse and its relationship to other forms of violence, abuse and harassment (see [Removed for Review]).

Third, civil and criminal laws on stalking, bullying, harassment, discrimination and other unlawful or criminal acts should be revised to keep pace with the ever-changing nature of cybervictimisation, especially amongst marginalised communities. Although existing laws

may be sufficient to address some of these behaviours, in some circumstances the introduction of specific criminal offences, or amendments to legislation within the civil law, will ensure that there is some recourse for victims of online abuse and harassment.

Fourth, policies and practices for the prevention of digital abuse and harassment need to be sensitive to the experiences of sexuality- and gender- diverse populations and explicitly prohibit homophobia and transphobia in educational campaigns in schools, universities, workplaces and the community more broadly. Fifth, social media and other online platforms need policies that explicitly prohibit homophobic, transphobic and other forms of hate speech and abuse on the basis of sexuality and gender. Sites need to backup these policies with effective and robust content removal and/or account disabling functions that will to some extent alleviate the problem. Finally, more research needs to investigate the lived experiences of sexuality- and gender-diverse populations in order to more adequately respond to, and prevent, digital harassment and abuse.

Limitations and future research

The present study has some limitations that should be taken into consideration. First, as highlighted earlier, research suggests that LGB individuals may not disclose their sexuality in their online profile and/or participation. Unfortunately, the extent to which participants disclosed their sexuality and/or gender identity in their online social media profiles or content was not accounted for in this survey. It is thus unclear whether those who reveal their gender or sexuality identity online are more likely to experience abuse and harassment than those who keep their identities hidden. Second, as our broader study was not exclusively focused on the experiences of digital abuse and harassment among sexuality- and gender-diverse populations, we were limited in investigating specific impacts, access to services, actions taken, and effectiveness of actions. Related to this point, our samples of sexuality and gender

minority adults were limited in size as a consequence of these communities representing a very small proportion of the general population. Further research is thus needed to explore not only prevalence rates, but also specific experiences of victimisation with larger samples.

Finally, while quantitative research is important in identifying overall trends and as a resource for advocacy and policy reform, the experiences of violence, harassment and abuse among marginalised communities are complex and multi-faceted. As such, qualitative research is also needed to fully understand the lived experiences of sexuality- and gender-diverse adults to identify potential courses of action to respond to, and prevent, these behaviours.

Conclusion

Unsurprisingly the findings of our study suggest that patterns of digital harassment and abuse reflect those in society more broadly. We know, for instance, that street harassment and hate crimes are prevalent for gender variant and sexuality minority communities, and even more so than gender-based harassment generally. Our findings are particularly concerning regarding the experiences of transgender participants. These participants were more likely to experience both a greater range of abusive behaviours, as well as at much greater proportions, being approximately three times as likely to be victimised compared with cisgender heterosexual participants. The nature of that harassment, while greater across the board, was much higher for sexual harassment, gender harassment and sexuality-based harassment, than that experienced by heterosexual men and women.

Overall, the findings highlight the importance of actively promoting safe and inclusive online spaces. While the law is one part of the solution (through hate speech and anti-discrimination legislation, for example), the policies and practices of social media and online platform providers are also important for challenging and preventing such behaviour,

using tools such as community standards and reporting functions. Other sectors of society, such as police, as well as educational and governmental institutions, likewise play a crucial role in challenging cultures and practices that tolerate digital harassment and abuse. Finally, given that there is a paucity of existing research specifically on digital victimisation of sexuality and gender minority adults, more research is needed to help guide the strategies for addressing this growing problem.

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Table 1

Definitions of digital harassment and abuse and related concepts

Concept	Study	Definition
<i>Cyber-aggression</i>	Shapka and Maghsoudi (2017)	Aggression that occurs virtually via a digital/electronic medium such as a mobile phone or over the internet, including comments which are socially embarrassing, hurtful, mean or hate-based.
<i>Cyberbullying</i>	Tokunaga (2010); Willard (2007)	Any behaviour performed through electronic or digital media by individuals or groups that repeatedly communicates hostile or aggressive messages intended to inflict harm or discomfort on others / including: flaming, harassment (repetitive, offensive messages), outing and trickery, exclusion, impersonation, cyberstalking (sending repetitive threatening communications), and non-consensual 'sexting' (distributing nude pictures of another individual without that person's consent).
<i>Cyber-obsessional pursuit (COP)</i>	Spitzberg and Hoobler (2002)	Unwanted pursuit of intimacy through the repeated invasion of a person's sense of physical or symbolic privacy conducted via digital or online means.
<i>Cyberstalking</i>	Dreßing et al. (2014); Reyns et al. (2012)	Repeated unwanted communication, unwanted contact, unwanted sexual advances, threats of violence/physical

harm; and that cause a victim to feel fearful for their safety.

Digital harassment and abuse Powell and Henry (2016) Offensive comments and name-calling, social embarrassment, targeted harassment, technology-facilitated sexual violence and hate-based abuse.

Electronic aggression Bennet et al. (2011) Experiences include hostility, intrusiveness, humiliation and exclusion.

Image-based sexual abuse (IBSA)/Image-based abuse (IBA) Powell and Henry (2016; 2017) Taking, distributing and/or threatening to distribute a nude or sexual image of a person without their consent.

Internet Harassment Ybarra and Mitchell (2004) Overt, intentional acts of aggression towards another person online.

Online harassment Finn (2004); Lindsay et al. (2015); Finkelhor et al. (2000) Repeated messages that threaten, insult, or harass; threats or other offensive behaviour sent to the victim or posted online for others to see.

<i>Technology-facilitated sexual violence (TFSV)</i>	Powell and Henry (2014; 2017); Henry and Powell (2014; 2015; 2016)	Harmful sexually aggressive and harassing behaviours perpetrated with the aid or use of digital communication technologies, including: sexual aggression and/or coercion; image-based sexual abuse (including ‘revenge pornography’ and ‘sextortion’); online sexual harassment; and sexuality and/or gender-based harassment (including hate-speech).
<i>Technology-facilitated stalking</i>	Woodlock (2013; 2016)	Repeated, unwanted contact that results in a victim feeling fearful.
<i>Virtual hate speech</i>	Awan and Zempi (2017)	Material of a malicious nature that is posted with the intent to promote or justify intolerance, hostility and prejudice towards an individual or group of people.

Table 2

Demographic characteristics (%) for the matched samples of sexuality diverse and gender diverse adults

	Sexuality diverse women			Sexuality diverse men			Gender diverse adults		
	Gay	Bi	Hetero	Gay	Bi	Hetero	Women	Men	Transgender
Country									
Australia	61.7	61.7	61.7	61.7	61.7	61.7	53.3	53.3	53.3
UK	38.3	38.3	38.3	38.3	38.3	38.3	46.7	46.7	46.7
Age									
19 and under	12.8	12.8	12.8	12.8	12.8	12.8	30.0	30.0	30.0
20-29	31.9	31.9	31.9	31.9	31.9	31.9	36.7	36.7	36.7
30-39	27.7	27.7	27.7	27.7	27.7	27.7	16.7	16.7	16.7
40-49	21.3	21.3	21.3	21.3	21.3	21.3	13.3	13.3	13.3
50 and over	6.4	6.4	6.4	6.4	6.4	6.4	3.3	3.3	3.3
Relationship status									
Single	59.6	63.8	59.6	66.0	63.8	61.7	70.0	70.0	70.0
Married/defacto	36.2	36.2	36.2	31.9	36.2	34.0	20.0	20.0	20.0

Other	4.3	0.0	4.3	2.1	0.0	4.3	10.0	10.0	10.0
Education status									
Secondary	34.0	29.8	34.0	29.8	27.7	36.2	56.7	53.3	56.7
Tertiary	66.0	70.2	66.0	70.2	72.3	63.8	43.3	46.7	43.3
Employment status									
Employed/volunteer	66.0	68.1	68.1	72.3	78.7	66.0	43.3	40.0	40.0
Stay-at-home/unemployed	25.5	19.1	23.4	10.6	14.9	23.4	23.3	20.0	26.7
Student	8.5	12.8	8.5	17.0	6.4	10.6	33.3	40.0	33.3

Table 3

Lifetime prevalence (%) of digital harassment and abuse (sexuality diverse women)

	Gay	Bi	Hetro	χ	φ_c
<i>Digital harassment</i>					
Posted any images of you online without permission	51.1	42.6	48.9	0.74	.07
Posted embarrassing images of you online without permission	38.3	34.0	23.4	2.55	.13
Spread rumours or lies about you	42.6	42.6	36.2	0.57	.06
Used offensive language towards you	57.4	38.3	34.0	5.95	.21
Threatened to physically harm you	34.0	23.4	17.0	3.73	.16
Harassed you for a sustained period	42.6	44.7	27.7	3.42	.16
Shared embarrassing details about you	38.3	42.6	29.8	1.71	.11
<i>Digital sexual harassment</i>					
Sexually harassed you	34.0	44.7	38.3	1.13	.09
Posted your personal details online saying you are available to have sex	6.4	8.5	8.5	0.20	.04
Received unwanted sexually explicit images, comments etc.	21.3	40.4	29.8	4.08	.17
Experienced repeated and/or unwanted sexual requests	14.9	34.0	21.3	4.99	.19

Publicly posted online an offensive sexual comment about you	12.8	21.3	17.0	1.21	.09
<i>Image-based sexual abuse</i>					
Taken a nude or semi-nude image of you without permission	10.6	12.8	14.9	0.32	.05
Posted online or sent onto others a nude or semi-nude image of you without permission	10.6	10.6	10.6	0.00	.00
Threatened to post online or send onto others a nude or semi-nude image of you without permission	6.4	10.6	6.4	0.79	.08
<i>Sexual aggression and/or coercion</i>					
Taken an image or video of an unwanted sexual experience	4.3	12.8	8.5	2.19	.13
Posted online or sent onto others an image or video of an unwanted sexual experience	2.1	10.6	6.4	2.85	.14
Threatened to post online or send onto others an image or video of an unwanted sexual experience	4.3	6.4	10.6	1.51	.10
Unwanted sexual experience with someone you first met online	10.6	14.9	10.6	0.54	.06
Met a person on an online dating site or app and then had an unwanted sexual experience	8.5	17.0	8.5	2.26	.13

<i>Gender/sexuality-based harassment</i>					
Posted offensive and/or degrading messages about your gender	29.8	42.6	21.3	5.02	.19
Posted offensive and/or degrading messages about your sexuality	38.3	31.9	19.1	4.27	.17
Messages threatening to sexually assault you	10.6	8.5	10.6	0.16	.03
Described or visually represented an unwanted sexual act against your avatar or game character	6.4	6.4	8.5	0.22	.04
Described or visually represented an unwanted sexual act against you using an online site etc.	8.5	27.7	10.6	7.86	.02
Posted offensive and/or degrading messages or comments about your gender in an online gaming space etc.	10.6	10.6	8.5	0.16	.03

Table 4

Lifetime prevalence (%) of digital harassment and abuse (sexuality diverse men)

	Gay	Bi	Hetro	χ	ϕ_c
<i>Digital harassment</i>					
Posted any images of you online without permission	59.6	40.4	34.0	6.71	.22
Posted embarrassing images of you online without permission	25.5	36.2	19.1	3.53	.16
Spread rumours or lies about you	29.8	44.7	31.9	2.67	.14
Used offensive language towards you	53.2	66.0	38.3	7.22	.23
Threatened to physically harm you	27.7	51.1	27.7	7.50	.23
Harassed you for a sustained period	19.1 _a	55.3 _{a,b}	21.3 _b	17.82 ^{***}	.36
Shared embarrassing details about you	25.5	46.8	29.8	5.31	.19
<i>Digital sexual harassment</i>					
Sexually harassed you	10.6 _a	31.9 _{a,b}	8.5 _b	11.15 ^{**}	.28
Posted your personal details online saying you are available to have sex	12.8	27.7	12.8	4.77	.18
Received unwanted sexually explicit images, comments etc.	31.9	29.8	25.5	0.48	.06
Experienced repeated and/or unwanted sexual requests	21.3	29.8	23.4	0.99	.08

Publicly posted online an offensive sexual comment about you	12.8	21.3	17.0	1.21	.09
<i>Image-based sexual abuse</i>					
Taken a nude or semi-nude image of you without permission	10.6	12.8	10.6	0.14	.03
Posted online or sent onto others a nude or semi-nude image of you without permission	14.9	14.9	10.6	0.49	.06
Threatened to post online or send onto others a nude or semi-nude image of you without permission	6.4	19.1	8.5	4.37	.18
<i>Sexual aggression and/or coercion</i>					
Taken an image or video of an unwanted sexual experience	8.5	17.0	6.4	3.13	.15
Posted online or sent onto others an image or video of an unwanted sexual experience	12.8	14.9	8.5	0.94	.08
Threatened to post online or send onto others an image or video of an unwanted sexual experience	8.5	10.6	10.6	0.16	.03
Unwanted sexual experience with someone you first met online	17.0	21.3	14.9	0.68	.07
Met a person on an online dating site or app and then had an unwanted sexual experience	12.8	14.9	10.6	0.38	.05

Gender/sexuality-based harassment

Posted offensive and/or degrading messages about your gender	14.9	27.7	12.8	4.06	.17
Posted offensive and/or degrading messages about your sexuality	36.2 _a	42.6 _b	10.6 _{a,b}	12.82 ^{**}	.30
Messages threatening to sexually assault you	12.8	23.4	17.0	1.85	.11
Described or visually represented an unwanted sexual act against your avatar or game character	14.9	17.0	14.9	0.11	.03
Described or visually represented an unwanted sexual act against you using an online site etc.	14.9	19.1	10.6	1.34	.10
Posted offensive and/or degrading messages or comments about your gender in an online gaming space etc.	17.0	17.0	10.6	1.01	.09

Table 5

Lifetime prevalence (%) of digital harassment and abuse (gender diverse adults)

	Female	Male	Transgender	χ	ϕ_c
<i>Digital harassment</i>					
Posted any images of you online without permission	33.3	30.0	53.3	4.02	.21
Posted embarrassing images of you online without permission	30.0	23.3	46.7	3.90	.21
Spread rumours or lies about you	13.3 _a	16.7 _b	66.7 _{a,b}	24.52 ^{***}	.52
Used offensive language towards you	23.3	33.3	60.0	9.07	.32
Threatened to physically harm you	10.0 _a	23.3 _b	63.3 _{a,b}	21.16 ^{***}	.49
Harassed you for a sustained period	13.3 _a	13.3 _b	63.3 _{a,b}	23.81 ^{***}	.51
Shared embarrassing details about you	23.3 _a	20.0 _b	63.3 _{a,b}	15.23 ^{***}	.41
<i>Digital sexual harassment</i>					
Sexually harassed you	0.0 _a	6.7 _b	56.7 _{a,b}	34.56 ^{***}	.62
Posted your personal details online saying you are available to have sex	3.3	13.3	20.0	3.94	.21
Received unwanted sexually explicit images, comments etc.	16.7	40.0	46.7	6.59	.04
Experienced repeated and/or unwanted sexual requests	10.0	23.3	33.3	4.76	.09

Publicly posted online an offensive sexual comment about you	6.7	16.7	20.0	2.34	.16
<i>Image-based sexual abuse</i>					
Taken a nude or semi-nude image of you without permission	10.0	23.3	23.3	2.32	.16
Posted online or sent onto others a nude or semi-nude image of you without permission	3.3	6.7	23.3	6.98	.28
Threatened to post online or send onto others a nude or semi-nude image of you without permission	3.3	6.7	23.3	6.98	.28
<i>Sexual aggression and/or coercion</i>					
Taken an image or video of an unwanted sexual experience	3.3	10.0	20.0	4.28	.22
Posted online or sent onto others an image or video of an unwanted sexual experience	3.3	10.0	16.7	2.96	.18
Threatened to post online or send onto others an image or video of an unwanted sexual experience	10.0	13.3	20.0	1.26	.12
Unwanted sexual experience with someone you first met online	10.0	16.7	23.3	1.92	.15
Met a person on an online dating site or app and then had an unwanted sexual experience	10.0	6.7	16.7	1.58	.13

Gender/sexuality-based harassment

Posted offensive and/or degrading messages about your gender	3.3 _a	6.7 _b	60.0 _{a,b}	33.91 ^{***}	.61
Posted offensive and/or degrading messages about your sexuality	3.3 _a	6.7 _b	63.3 _{a,b}	36.94 ^{***}	.64
Messages threatening to sexually assault you	3.3	16.7	33.3	9.27	.32
Described or visually represented an unwanted sexual act against your avatar or game character	3.3 _a	13.3 _b	33.3 _{a,b}	10.08 ^{**}	.34
Described or visually represented an unwanted sexual act against you using an online site etc.	6.7	16.7	20.0	2.34	.16
Posted offensive and/or degrading messages or comments about your gender in an online gaming space etc.	6.7	10.0	33.3	9.12	.32
