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Shazia Akhtar, Catriona M. Morrison

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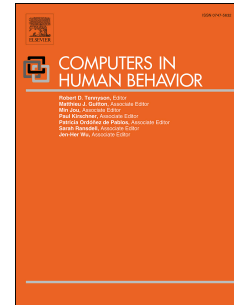
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RUNNING HEAD: Online trolling

The prevalence and impact of online trolling of UK Members of Parliament

Shazia Akhtar and Catriona M. Morrison*

Department of Psychology, University of Bradford

* Corresponding author. Correspondence should be addressed to Catriona Morrison,
Division of Psychology, University of Bradford, Richmond Road, Bradford, BD7 1DP,
UK. Email: c.morrison2@bradford.ac.uk

Abstract

Online trolling is a new phenomenon that is increasingly coming to public attention. Recent events in the United Kingdom (UK) have raised concerns about this behaviour. Trolling is particularly targeted at public figures, and Members of Parliament (MPs) are a prime target. In this study we surveyed UK MPs about their experiences and the impact of being trolled by completing a short online questionnaire. One-hundred and eighty-one MPs responded to our survey. Chi-square tests for independence and one-way ANOVA was employed to analyse the data. All MPs had experienced trolling and many were trolled multiple times a day, and the principle platforms for this abuse were Twitter and Facebook. The pattern of trolling varied between male and female targets, with males reporting more concern about reputational damage, and females more concern about their personal safety. The impact of being trolled varied between males and females, with a much greater impact on female MPs. We discuss the effects of online trolling on the victims of this behaviour.

Introduction

'I've had death threats, I've had people tweeting that I should be hung...I've had my car smashed time after time.'

'My car parked on the street has been damaged repeatedly over a number of years, I suspect by the same person.'

Online threat to an MP: *'I am going to kill you and your family.'*

MPs' reports of online trolling

Online abuse – commonly known as “trolling” - is an interpersonal, antisocial behaviour prominent within Internet culture across the world, a form of online bullying and harassment (Pew Research Centre, 2014). Common online abusive behaviour includes starting aggressive arguments on Internet sites (Klempka & Stamson, 2013) and posting inflammatory, malicious messages in online comment sections deliberately to provoke, disrupt, and upset others (Gammon, 2014).

Online social media abuse (OSMA) is a relatively new phenomenon, concerning as it does recent developments in online technologies, and it is not surprising that there is a relatively limited pool of published academic research into the phenomenon. However, there is an assumption that online abuse via social media is widespread and growing, in line with the expansion of social media. Traditional research on online bullying/cyberbullying has been carried out in adolescents and college students (e.g. Mason, 2008 Shariff, 2008, 2009;). This type of bullying is mainly in the form of text messages, chatrooms and e-mails. These studies conclude that the victims are often females (e.g. Noret and Rivers, 2006) or from minority racial groups e.g. (Li, 2006) or minority groups such as LGBT (e.g. Blumenfeld & Cooper, 2010).

Evidence indicates that public figures share a greater risk of being threatened and stalked, relative to non-public figures (Hoffmann & Sheridan, 2008a, 2008b; James et al., 2011; James et al., 2016) and that politicians, and other public figures, attract more inappropriate, intrusive or aggressive attention than the population at large (James, Farnham & Wilson, 2013; Mullen, James et al., 2009). This could be a consequence of their public profile, their responsibilities to their constituents and their being seen as possessing power. The problem is not a new one (James, 2014; Regis, 1890), and its manifestations today are similar to those going back 150 years (Poole, 2000). Whilst most contacts from the general public are appropriate - asking for help or advice, expressing opinions, or sometimes even gratitude - a proportion are intrusive, demanding, or aggressive (Mullen, James et al., 2009). Despite the obvious political concerns and media attention, there has been relatively little specific research on the phenomenon, and few attempts to quantify the extent of the problem. Anecdotal media reporting suggests high and increasing levels of abuse - on Twitter in particular.

James, Farnham, Sukhwai, Jones, Carlisle, & Henley (2016) published the first study that investigated aggressive/intrusive behaviours, harassment and stalking in UK Members of Parliament. Their study was not so much concerned with the source of abuse, but rather focussed on the prevalence of aggressive/intrusive behaviours, harassment and stalking. Their study also was not restricted to Members of the UK Parliament, but compared these with results from the later application of their questionnaire to members of parliaments in Queensland, New Zealand and Norway. Their data were collected in 2010, and of the 239 UK MPs that took part, 10% reported abuse via social media. Overall 81% of UK MPs who participated had experienced some type of abuse, 18% had been subject to attack/attempted attack, 42% to threats to harm and 22% to property damage. In 53% of respondents,

experiences met definitions of stalking or harassment. Their study concluded with implications for the provision of risk assessment and management.

Studies carried out in Queensland, Norway and New Zealand (Pathé et al; Bjelland & Bjørge; Every-Palmer et al, 2015) based on the same questionnaire that James and colleagues used in 2010, were carried out in 2011, 2013 and 2014 respectively. Whereas 10.1% had reported inappropriate or threatening social media contacts in the 2010 Westminster survey, the proportions in the later surveys were 36.6%, 37.8% and 60%. This suggests that abuse of MPs via social media may well have increased in line with increasing use of social media in general. Other studies in this area (e.g. Adams, Hazelwood, Pitre, & Bedard, 2009; Brottforebyggande Radet, 2012; Malsch, Visscher, & Blaauw, 2002; Staatens Offentliga, Utredningar, 2006; Wallin & Wallin, 2014) have not looked at online abuse specifically and, being based upon different methodologies, are not directly comparable.

James et al. (2016) suggested that some individuals and groups of MPs are more likely to be targeted in general by abusive behaviour and threats than others - for instance those with more controversial views, and those who engage more in posting in online forums (James et al., 2016). In New Zealand, in terms specifically of social media, MPs tended to believe that abuse was prompted by political disenchantment and less likely to lead to violence (Every-Palmer et al, 2015). Other studies have suggested a more mundane factor to explain online abuse – boredom and a desire to attract attention, facilitated by anonymity, rather than a political or serious threat to endanger (Buckels, et al, 2014; Shachaf & Hara, 2010). This suggests that, while online abuse is unpleasant and threats are often made, these are an aspect of online abuse, or trolling, to a well-known figure, rather than an indication of an intent to injure. The ease with which a threat is made may be proportionately related to the lack of an intention to follow through, as has been suggested by a comparison of written letters and e-mails to public officials (Schoenemann-Morris et al 2007).

To this end, we were interested in investigating the prevalence and impact of online trolling through different social media platforms in UK MPs today. Our first focus was to define online trolling. Trolling is a conceptually fuzzy term; it means different things to different people Hardaker (2010). Hardaker (2010) surveyed various definitions of trolling and noted that most of these definitions share a lot of common ground, e.g., posting of provocative messages on the internet; aggressive malicious behaviour posted on online forums; malicious online behaviour; hurtful insightful comments. For the purposes of the present study, it was important to ascertain if MPs have experienced online trolling during the course of being an MP. To determine this, we defined online trolling as experiencing one form of online abuse (posting of defamatory or false materials, racial abuse, sexual abuse, abuse on political grounds/beliefs, abuse on religious grounds/beliefs) and one form of online threatening behaviour (death threats, physical violence, rape, physical violence to friends and family, reputational damage, property damage) as set out in the questionnaire (see Appendix).

Our research set out, first, to compare differences in online social media abuse (OSMA) compared with other platforms for potential abuse, e.g. face-to-face, letters, phone calls. In particular we were interested to see whether social media is increasingly becoming a popular platform for abuse. We wanted to ascertain whether OSMA was more frequent or at the same level as through other platforms for potential abuse. Second, we were interested in the prevalence of OSMA and any possible gender differences. Third, we were interested in the psychological and emotional effects of OSMA, including gender differences. Our aim was to quantify the extent, scale and nature of OSMA and the impact this has had on UK Members of Parliament – not just in immediate terms, but in the effect it might have had on their relationships and those around them. As such, a survey instrument was developed and administered to UK MPs at Westminster.

Method

Study population – The study population comprised members of the UK Parliament specifically members of the House of Commons - the elected chamber with legislative supremacy in the UK's bicameral parliamentary system. At the time of the survey there was a total of 650 members of the UK Parliament. One hundred and eighty-one (28%) members of the UK Parliament completed the online survey.

The Survey

We used a questionnaire which was adapted from one developed from a large Australian community survey (Purcell, Pathé, & Mullen, 2002; Wooster, Farnham, & James, 2013, 2015; James et al., 2016). As such, much of the questionnaire had already been tried and tested. The adaptations mainly concerned a focus on online social media abuse and its effect. The questionnaire comprised of 24 questions (see Appendix¹) and was restricted to experiences in the course of the MPs' work, and excluded events in their private lives. The survey consisted of seven multiple answer questions; fourteen single answer questions and three yes/no questions. Of these questions ten questions had the option of providing 'other' responses. The first part of the survey enquired about the usage of different social media platforms and the reasons for using social media; the second part focussed on the different types and reasons for online trolling behaviour; the third part focused on the impact of this online social media abuse; and there was a final section on demographic details of the respondents. All 650 UK MPs were invited to complete the survey, regardless of whether they had experienced any online trolling.

Administration of the Survey

The online survey was distributed via a Qualtrics web link between February 2018 and April 2018. The questionnaire allowed members to fill in their names and personal details, if they chose to, although we were aware that many respondents would consider such

¹ Given the limited time MPs have we felt it appropriate to limit the number of questions in the survey to yield a higher N.

material to be personal and might feel more comfortable giving answers anonymously. The questionnaire contained a statement that answers would be treated in strictest confidence and that none would be disclosed in an identifiable form in the study.

Statistical analysis

The data collected through online survey was analyzed by statistical techniques. First, descriptive analysis was used for describing and summarizing the sample. Second, Pearson's chi-square test for independence (X^2) was employed for investigating whether there were relationships between categorical variables. Finally, a one-way ANOVA (F) technique was employed (all assumptions were met) to determine whether there were any statistically significant differences between the means of groups (males and females). For determining effect sizes, odds ratio (OR) and eta square (η^2_p) were calculated for chi square and ANOVA, respectively.

Results

Data completion

Ten MPs declined to complete the survey, as they did not feel the survey applied to them. A further two MPs declined to complete the survey, as they were too busy. Overall, 181 of the 650 UK MPs completed the survey (response rate = 28%).

Data on whether or not particular forms of online abuse and online threatening behaviour had been experienced was 100% complete; thus, all 181 MPs had experienced at least one form of online abuse and online threat during the course of their time as MP.

Characteristic and representative nature of the sample

Of the 181 respondents, all chose to stay anonymous. One hundred and fifty-four (86%) gave their sex and 152 (84%) their ages. Of those for whom data were available, 95 (61.6%) were male and 59 (38.4%) were female. This compares with 68% male and 32% female in the relevant parliamentary intake. Hence, in terms of gender balance, the

respondents were closely representative of the full complement of MPs. The results are split into two sections: the first focuses on the prevalence of abuse, across different platforms, and the second focuses on the effects of online abuse on MPs.

Prevalence of social media users

Of the 181 MPs who responded to the survey, 100% used some type of social media platform. Specifically, 165 respondents (92%) used Twitter, 123 respondents (68%) used Facebook, 103 respondents (57%) used Instagram and 101 respondents (56%) used LinkedIn. Figure 1 illustrates the frequency with which these social media platforms are used, with Twitter being the most frequently used social media platform by UK MPs.

INSERT FIGURE 1 HERE

The survey revealed that 89% of the sample use social media for their political life, 55% for their personal life, and 79% for keeping up with the news. Overwhelmingly, 167 MPs (92%) think social media is an important form of communication. One aim of our study was to ascertain whether social media is increasingly becoming a popular platform for abuse compared to other platforms. We compared the prevalence of online social media abuse (OSMA) to other platforms where potential abuse can take place - emails, letter, phone calls and face-to face (see Table 1). We restricted our consideration of online social media abuse to Twitter and Facebook, and excluded Instagram and LinkedIn, as respondents reported very little abuse through these platforms. "Other platforms" was considered as emails, letters, phone calls and face-to-face interactions. A Chi-square analysis was applied to a 2 x 5 table, setting out type of platform (OSMA or other platforms) against frequency of abuse (daily, weekly, monthly, several times a year, never). Frequency of OSMA was significantly higher daily and weekly compared to other platforms, and monthly other platforms was significantly higher than OSMA [$\chi^2(5) = 135.48, p < 0.001$] OR 6.48] – (see Table 1).

From the prevalence rates for OSMA, we can conclude that the proportions of MPs affected by OSMA has undergone a major increase since the 2010 survey (James et al., 2016).

INSERT TABLE 1 HERE

Next we turn to gender differences in the prevalence of abuse. Due to the small number of respondents reporting abuse in other platforms, we compared gender difference only in the prevalence of OSMA. A greater proportion of males than females received OSMA [$\chi^2(5) = 78.29, p < 0.001$ OR 3.19]. Male respondents receive significantly more daily online abuse, with female respondents reporting significantly more weekly and monthly online abuse (see Table 2).

INSERT TABLE 2 HERE

We next analysed the different types of threats via OSMA that MPs had experienced. All respondents had experienced at least one form of OSMA and threat as described in the questionnaire (see Table 3). There were five categories of possible OSMA: (1) posting of defamatory or false materials, (2) racial abuse, (3) sexual abuse, (4) abuse on political grounds and (5) abuse on religious grounds. The mean number of forms of abuse experienced was 2.31 ($SD = 1.27$), which broke down to 2.9 ($SD = 1.43$) for females and 1.93 ($SD = 1.18$) for males, which a One-Way ANOVA revealed a significant difference [$F(1, 152) = 22.69, p < 0.001, \eta^2_p = .248$]. What is clear from the data is that female respondents seemingly report less OSMA than males, but are subject to a greater variety of forms of abuse, with the majority of abuse being personal in nature, e.g., sexual abuse. By contrast, male respondents report *more* OSMA, but the abuse is largely confined to their professional duties posting of defamatory materials, and abuse on political grounds. Examples of other types of abuse reported by MPs include:

'I have come across racial abuse but never targeted at me' (female MP)

'Personal insults' (female MP)

'LGBT abuse' (female MP)

'On the basis of my language use as a Welsh speaker' (male MP)

'General aggression' (female MP)

'Appearance' (female MP)

'Abuse in relation to the work and in person' (male MP)

'Just negative messages mostly' (male MP).

In terms of online threats, they fall into six categories: (1) death; (2) physical violence; (3) rape; (4) physical violence to friends and family; (5) reputational damage and (6) property damage. All respondents had experienced at least one form of threat (see Table 3). The overall mean number of these different kinds of threats was 1.95 ($SD = 1.2$), with female respondents experiencing a mean of 2.9 ($SD = 1.9$) different forms of online threats compared to males 1.3 on line threats ($SD = 1.23$); this difference was significant [$F(1, 153) = 10.98, p < 0.001, \eta^2_p = .341$]. Other types of online threats included:

'General Abusive Language' (female MP)

'I am going to die tomorrow' (female MP)

'I am going to kill you and your family' (female MP).

We next considered the reasons why MPs receive online abuse (see Table 3).

Regardless of gender, the majority of MPs (87.3%) view the reason for the online abuse to be due to political beliefs. Other reasons suggested for the abuse include:

'Constituents come to the MP as the saviour to their problem as victim from a perpetrator'

'If we have to deliver unwelcome news, we become a perpetrator/betrayer - disappointment and frustration can lead to abuse'

'There are also several constituents with severe mental health issues and, I understand from speaking to the fixated threat assessment centre that MPs are twice as likely as psychiatrists, statistically, to be threatened by constituents as they are by their patients - 20 re psychiatrists/40 re MPs - it is not an easy job'

'Inadequate who have been given a voice via the internet'

'Unstable individual - mental health issues'

'Constituents often feel disempowered and unrepresented, even when efforts are made to help - especially if the result is not welcome'.

Seventy-five percent of MPs reported that the amount of abuse had increased over the past two years.

Next we looked at the perpetrators of the online abuse. Forty-three point seven percent of the reported abuse was sent from anonymous people, and 52.7% of the abuse was from named individuals. In line with the literature Hardaker, (2013); Fichman & Sanfilippo, (2016:143), we found 93.7% of the abuse - where the perpetrator was known - was sent from male perpetrators regardless of the gender of the MPs.

Effects of online abuse

A key aim of the study was to look at the effects of online abuse both psychologically and emotionally. Table 3 shows how MPs responded to online abuse. Analysis of a 2x4 table of gender by response (I read in full, I read but never respond, I read and sometimes respond, I read and regularly respond) revealed significant differences between males and females [$X^2(3) = 36.48, p < 0.001$ OR 3.28], such that significantly more female MPs said, 'I read but never respond' compared to male MPs, and significantly more male MPs said 'I read, and sometimes respond' (see Table 3).

We then looked at actions taken as a result of OSMA. There were ten possible actions outlined in the survey. Ninety-two point three percent of respondents took some actions as a result of online trolling. The mean number of actions taken by female respondents was 4.2 ($SD = 1.89$) compared with 2.8 ($SD = 1.93$) for males; this difference was significant [$F(1, 152) = 14.22, p < 0.001, \eta^2_p = .244$]. In terms of seeking help, there were 11 options set out in the survey (see Table 3). Female respondents selected an average of 3.2 ($SD = 1.1$) options and males $M = 2.9$ ($SD = 1.04$); this difference was not significant.

Finally we analysed the effects of OSMA on MPs. On a five-point scale, with 1 being “not at all frightened” and 5 being “extremely frightened or fearful”, female respondents scored an average of 3.6 ($SD = 1.98$) and males 2.3 ($SD = 1.04$): this difference was significant [$F(1, 152) = 8.59, p < 0.001, \eta^2_p = .248$]. Further we asked participants to select the effects of OSMA (Table 3). There were five options in the survey: (1) mental or emotional stress, (2) problems with your friends or family, (3) damage to your reputation, (4) problems with romantic relationships, (5) problems at work. Female respondents scored an average of 2.1 ($SD = 1.01$) and males 1.1 ($SD = 1.15$): this difference was significant [$F(1, 152) = 4.92, p < 0.05, \eta^2_p = .316$].

INSERT TABLE 3 HERE

Discussion

This is the first study to focus on the experience of online trolling in UK MPs. One hundred per cent of our respondents actively used social media, with Twitter being the most commonly used - in the majority of cases for political purposes. The most striking finding here is that *100% of respondents*, regardless of their gender, reported some form of trolling. This represents a huge shift in recent times, when compared it with James et al's. 2016 study, data for which were collected in 2010, and in which just 10% of MPs reported online abuse. Eight years later the landscape has shifted considerably and the experience of

online abuse appears to have increased tenfold. Of course, in 2010, online platforms such as Twitter and Facebook were in their relative infancy, but the huge shift is concerning for several reasons. Harassment, of which online trolling is an example, is psychologically destructive and takes a toll on the victims in terms of personal suffering and changes to lifestyle (Kuehner, Gass, & Dressing, 2007; Thomas, Purcell, Pathe, & Mullen, 2008). Whilst UK MPs have historically been vulnerable to inappropriate, intrusive or aggressive behaviour, this has traditionally been on other platforms, such as face-to-face, letters, emails and telephone calls (James et al., 2001; Poole, 2000; Regis, 1890). Our study indicates a shift from other platforms to OSMA, and in particular Twitter. This finding has wider implications for how MPs communicate. Also we cannot ignore that certain politicians are targeted for abuse. This, perhaps not surprisingly, relates to their public profile and to how active they are on social media.

The next finding of note from our study concerns gender differences. Bearing in mind that our respondents are fairly representative of the gender balance of MPs, male MPs report *significantly* more abuse than females, contrary to what we might have predicted. This finding is supported by recent, ongoing research (McLoughlin and Ward under review). Our data also show that female MPs report significantly more racial and sexual abuse. Much media coverage has focused on abuse and threats directed at female members (especially, younger women MPs) and at those from ethnic minorities. Recent evidence presented to the Home Affairs Select Committee indicated that Muslim and Jewish women were the number one targets of abuse (Home Affairs, Select Committee, 2017). Female MPs themselves have repeatedly reported widespread and alarming levels of threats of sexual violence and repeated harassment, as well as more general misogynistic comments (Hansard, 2016). As the Inter-Parliamentary Union (2016:6) briefing puts it:

‘Social media have become the number one place with psychological violence – particularly in the form of sexist and misogynistic remarks, humiliating images, mobbing, intimidation and threats – is perpetrated against women parliamentarians.’

In the UK, two men have been jailed for online threats made against MPs (against Stella Creasy in 2014 and Luciana Berger in 2016), whilst Jess Phillips MP revealed that she had received over 600 rape threats in one evening via Twitter (*Daily Telegraph*, 31 May 2016). A recent BBC Radio 5 survey of female MPs (from all parties) indicated that the overwhelming majority (nine out of ten) reported receiving online and verbal abuse from the public whilst a third had considered quitting as a result (*BBC News Online*, 25 January 2017). In part, the abuse of female politicians has been linked to the general high level of misogyny online (Demos, 2014, 2016). Arguably, this is then exacerbated in political context where research suggests that politics and political online discussion in a range of countries has consistently shown to be dominated by men (Stromer-Galley, 2002; Harp and Tremayne, 2006; Trammell & Keshelashvili, 2005; Albrecht, 2006; Hagemann, 2002; Jankowski and van Selm, 2000; Jensen, 2003). Some researchers have argued, therefore, that directed threats against female MPs relate to attempts to delegitimise women politicians, restrict their rights to communicate and inhibit them from taking an active part in the political arena, and also from a sense that the abusive males feel threatened by high profile female politicians speaking out (IPU, 2016). As an extension of this, our study revealed that female MPs suffered more emotional stress and damage to their reputation. Thus to conclude on gender differences, our study is the first to show different patterns of trolling in males and females MPs. Male MPs reported more concern about reputational damage, and females more concern about their personal safety. Moreover, the impact of this trolling seemed to have a greater effect on females MPs compared to male MPs.

It is of note that the majority of MPs, regardless of gender differences and in line with the current literature, view the primary reason that they receive online trolling as being related to their political beliefs, (Prior, 2013; Lelkes, Sood & Iyengar 2015; Colleoni et al 2015). The House of Commons Deputy Speaker has confirmed that abuse spikes when emotive issues are discussed and, when individual MPs speak out on such issues, they become targets (Home Affairs Select Committee, 2017). This suggests support for a polarisation effect, and also that social media abuse is primarily reactive in nature.

A limitation to the study concerns the response rate of almost 30%. Whilst this is a respectable rate for such questionnaires and self-selection is common in all psychological research, it raises the question as to whether only those who had experienced online abuse responded to the questionnaire. Following this, another limitation to the study is that all respondents reported some type of trolling, as described in the survey (although some MPs declined to complete the questionnaire on the grounds that it did not apply to them). It could be that the 72% of UK MPs that did not complete the online survey don't show this pattern, however we do not have data to support this. Nonetheless, the results of our survey indicate nearly 30% of UK MPs have experienced online abuse which, other than being a concerning fact in itself, would still represent a threefold growth in the past eight years, compared with the 10% found by James et al. (2016).

Conclusions/implications/policy suggestions

It is clear that MPs have a significant problem of online abuse by members of the public through Twitter and Facebook. Much of this is political and arises in reaction to their statements, public positions or public actions. The question arises as to what could be done about it. It might be helpful for MPs to be educated about online social media abuse, its meaning and how to deal with it. Some politicians and others have suggested more radical solutions in terms of getting the companies providing the online platforms to police their use.

Whilst this might be desirable, it is unlikely to be realistic, given the unbounded nature of Internet-based communications. Finally The Independent Committee on Standards in Public Life said it would examine whether existing laws to counter intimidation and abuse are still fit for purpose. Given the lack of prosecutions, we would think not. Stephen Kavanagh, the chief constable who heads up the fight against digital crime, has called for fresh laws to tackle ‘the unimaginable scale of online abuse’ which he admitted was threatening to overwhelm the police force.

Our research highlights that a significant number of MPs (mostly female) are left feeling emotionally and psychologically concerned as a result of social media trolling. This issue needs to be addressed, with more help for MPs, and others with a public profile, in order to cope with inevitable online social media trolling. In particular, more needs to be done to support MPs’ mental health in this regard. The organisation Mind (mind.org.uk) does have very helpful guidance for MPs’ and staffers’ general mental health issues, and this could be expanded to include specific advice on how to deal with this relatively new and growing form of harassment.

Future Research

As mentioned we do not have data on the political advantages of MPs using online social media as a way of communicating as that was not the purpose of our study. This is an extremely complex issue, and future research should look at this in more detail and weigh the relative merits of online social media platforms for MPs and others with a high profile in the public domain.

References

- Adams, S. J., Hazelwood, T. E., Pitre, N. L., & Bedard, T. E. (2009). Harassment of members of parliament and the legislative assemblies in Canada by individuals believed to be mentally disordered. *Journal of Forensic Psychiatry and Psychology*, 20, 801–814
- Albrecht, S. (2006). Whose voice is heard in online deliberation? A study of participation and representation in political debates on the Internet. *Information, Communication & Society*, 9, 62–82.
- BBC News Online, (2017) ‘Mistreatment of Women MPs Revealed’, 25 January. <http://www.bbc.co.uk/news/uk-politics-38736729>. (Last accessed 4 April 2017)
- Buckels, E. E., Trapnell, P. D., & Paulhus, D. L. (2014). Trolls just want to have fun. *Personality and Individual Differences*, 67, 97-102.
- Colleoni, E., Rozza, A and Arvidsson, A. (2014). Echo chamber or public sphere? Predicting political Orientation and measuring political homophily in Twitter using big data. *Journal of Communication*, 64 (2): 317–332.
- Daily Telegraph, (2016) ‘Labour MP Jess Phillips receives more than 600 rape threats in one night’. 31 May. <http://www.telegraph.co.uk/news/2016/05/31/labour-mp-receivesmore-than-600-rape-threats-in-one-night/>. (Last accessed 4 April 2017).
- Demos, (2016) *The Use of Mysogynistic terms on Twitter*. <https://www.demos.co.uk/wpcontent/uploads/2016/05/Misogyny-online.pdf>. (Last accessed 5 April 2017).
- Every-Palmer, S., Barry-Walsh, J., & Pathé, M. (2015). Harassment, stalking, threats and attacks targeting New Zealand politicians: A mental health issue. *Australian and New Zealand Journal of Psychiatry*, 49, 634–641.
- Hagemann, C. (2002). Participation in and contents of two Dutch political party discussion lists on the internet. *Javnost/The Public*, 9, 61–76.
- Home Affairs Select Committee. (2017) *Hate Crime and its violent consequences* (HC609) <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/home-affairs-committee/hate-crime-and-its-violent-consequences/oral/49182.html>. (Last accessed 5 April 2017).
- Hardaker, C. (2010). Trolling in asynchronous computer-mediated communication: From user discussions to academic definitions.
- Harp, D., & Tremayne, M. (2006). The gendered blogosphere: Examining inequality using network and feminist theory. *Journalism & Mass Communication Quarterly*, 83(2), 247-264.
- Hoffmann, J., & Sheridan, L. (2008). Stalking, threatening, and attacking corporate figures. *Stalking, Threatening, and Attacking Public Figures: A Psychological and Behavioral Analysis*, 123-142.

- Hoffmann, J., & Sheridan, L. (2008). Celebrities as victims of stalking. *Stalking, Threatening, and Attacking Public Figures: A Psychological and Behavioral Analysis*, 195-213.
- Inter-Parliamentary Union. (2016). *Sexism, Harassment and Violence against Women Parliamentarians*, Geneva: IPU
- James, D. V. (2014). Another helping of “intellectual hash”: Commentary on “Assassins of rulers” (MacDonald, 1912). *Journal of Threat Assessment and Management*, 1, 228–240.
- James, D. V., Farnham, F. R., Sukhwai, S., Jones, K., Carlisle, J., & Henley, S. (2016). Aggressive/intrusive behaviours, harassment and stalking of members of the United Kingdom parliament: a prevalence study and cross-national comparison. *The Journal of Forensic Psychiatry & Psychology*, 27(2), 177-197.
- James, D. V., Farnham, F. R., & Wilson, S. P. (2013). The fixated threat assessment centre. *International handbook of threat assessment*, 299.
- Jankowski, N., & Van Selm, M. (2000). The promise and practice of public debate in cyberspace. *Digital democracy: Issues of theory and practice*, 149-165.
- Kuehner, C., Gass, P., & Dressing, H. (2007). Increased risk of mental disorders among lifetime victims of stalking – Findings from a community study. *European Psychiatry*, 22, 142–145.
- Mullen, P. E., James, D. V., Meloy, J. R., Pathé, M. T., Farnham, F. R., Preston, L., & Berman, J. (2009). The fixated and the pursuit of public figures. *The Journal of Forensic Psychiatry & Psychology*, 20(1), 33-47.
- Pathé, M. T., Lowry, T., Haworth, D. J., Webster, D. M., Mulder, M. J., Winterbourne, P., & Briggs, C. J. (2015). Assessing and managing the threat posed by fixated persons in Australia. *Journal of Forensic Psychiatry & Psychology*, 26, 425–438.
- Poole, S. (2000). *The politics of regicide in England, 1760–1850: Troublesome subjects*. Manchester, NH: Manchester University Press.
- Prior, M. (2013). Media and political polarization. *Annual Review of Political Science*, 16, 101-127.
- Régis, E. (1890). *Les Régicides dans l'Histoire et dans le Présent [Regicides in history and the present day]*. Paris: Maloine.
- Schoeman-Morris, K.A., Scalora, M.J., Chang, G.H., Zimmerman, W.J., and Garner, Y. (2007). A Comparison of Email Versus Letter Threat Contacts towards Members of the United States Congress. *Journal of Forensic Sciences*, 52(5):1142-1147. DOI: 10.1111/j.1556-4029.2007.00538.x
- Shachaf, P., & Hara, N. (2010). Beyond vandalism: Wikipedia trolls. *Journal of Information Science*, 36(3), 357-370.

- Stromer-Galley, J. (2002). New voices in the public sphere: A comparative analysis of interpersonal and online political talk. *Javnost-The Public*, 9(2), 23-41.
- Thomas, S. D., Purcell, R., Pathé, M., & Mullen, P. E. (2008). Harm associated with stalking victimization. *Australian and New Zealand Journal of Psychiatry*, 42, 800–806.
- Trammell, K. D., & Keshelashvili, A. (2005). Examining the new influencers: A self-presentation study of A-list blogs. *Journalism & Mass Communication Quarterly*, 82(4), 968-982.
- Wooster, L., Farnham, F., & James, D. (2013). The prevalence of stalking, harassment and aggressive/intrusive behaviours towards general practitioners. *Journal of Forensic Psychiatry & Psychology*, 24(4), 514-531.
- Wooster, L., James, D. V., & Farnham, F. R. (2015). Stalking, harassment and aggressive/intrusive behaviours towards general practitioners: (2) Associated factors, motivation, mental illness and effects on GPs. *Journal of Forensic Psychiatry and Psychology*, 27(1), 1-20

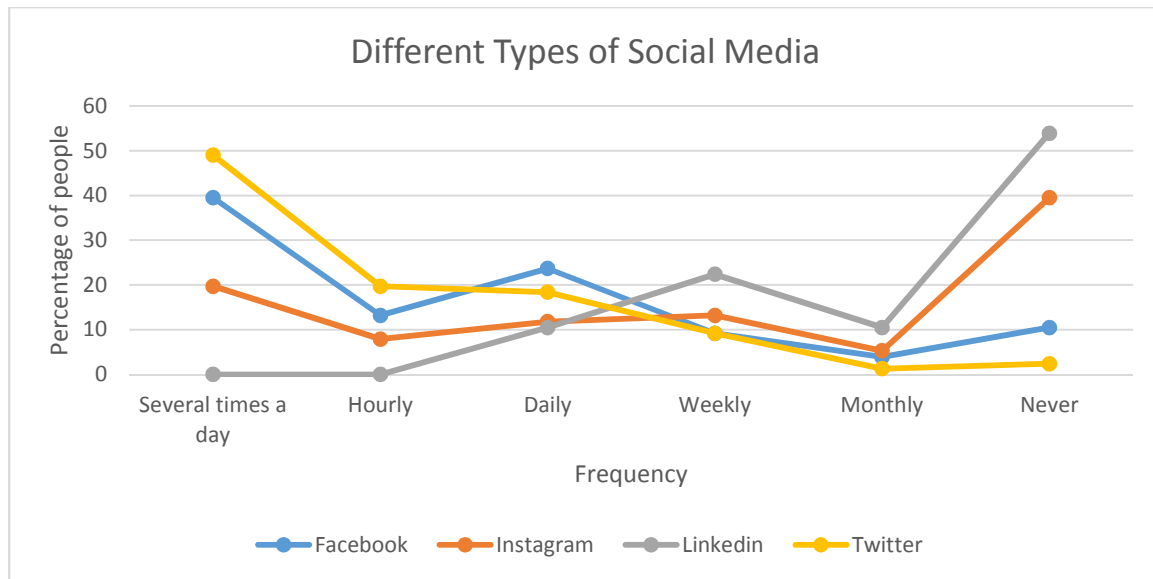


Figure 1. Frequency of Social Media Used amongst 181 UK Members of Parliament.

Table 1. Percentage of UK MPs reporting online Trolling and offline abuse

Frequency	Online	Offline	χ^2
Daily	53.4	5.9	68.42**
Weekly	38.4	24.4	20.46**
Monthly	6.2	29.4	19.32**
Several times a year	1.99	1.1	2.1 ns
Never	0	39.2	-

Note: ** denotes significance at $p=.001$; $N = 181$

Table 2. Percentage of Male and Female MPs reporting online abuse

Frequency	Male N= 95	Female N = 59	χ^2
Daily	59.25	48.59	19.48**
Weekly	36.52	42.22	7.89**
Monthly	2.99	7.89	15.25**
Several times a year	1.1	0	-
Never	0.1	0.9	-

Note: ** denotes significance at $p=.001$

Table 3. Percentage of Male and Female UK MPs

	Male N = 95	Female, N = 59	χ^2
Form of abuse			
Posting of defamatory or false material	92.6	74.58	23.96**
Racial abuse	4.21	8.47	1.29
Sexual abuse	18.95	74.58	78.88**
Abuse on political grounds	75.79	64.4	11.25**
Abuse on religious grounds	4.21	5.1	2.13
Threats			
Death	6.31	48.81	17.69**
Physical violence	14.74	69.45	24.69**
Rape	0	30.5	-
Physical Violence to friends or family	6.31	62.2	15.87**
Reputational damage	94.59	54.24	41.66**
Property damage	4.21	5.08	1.99
Reasons for abuse			
Political beliefs	81.05	79.7	8.75
Sexual Orientation	16.84	0.0	-
Brexit	3.16	0.0	-
Racial	0	1.7	-
How you deal with abusive and threatening messages			
I read in full	49.5	0	-
I read, but never respond	42.1	56	7.22**
I read and sometimes respond	45.2	37.2	5.95**
I read and regularly respond	44.2	1.7	-
Actions taken as a result of abuse			
Increase your security at home	75.26	96.6	9.47**
Increase your security at work	93.69	96.6	3.1
Change your telephone number	0	1.7	-
Lose time off work	22.63	37.29	12.86**
Reduce your social outings	5.26	45.76	9.78**
Experience changes in your close relationships	5.26	5.08	2.98
Feel concerned about being at home alone	5.26	49.15	16.87**
Feel fearful for your personal safety	12.63	83.1	40.99**
Feel fearful for the safety of those close to you	19.47	38.99	18.57**
Feel frightened you may be physically assaulted	24.37	37.29	9.88**
Effects of online abuse:			
Mental or emotional stress	46	79.6	34.53**
Problems with your friends or family	0	23.85	-
Damage to your reputation	50.5	66.1	13.57**

Problems with romantic relationships	19.6	5.69	9.44**
Problems at work	5.26	59.94	8.97**

Note: ** denotes significance at $p=.001$

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Appendix

Questionnaire

1. How often do you use the following forms of social media?

• Facebook	hourly	several times a day	daily	monthly	never
• Instagram	hourly	several times a day	daily	monthly	never
• LinkedIn	hourly	several times a day	daily	monthly	never
• Twitter	hourly	several times a day	daily	monthly	never
• I don't use social media	hourly	several times a day	daily	monthly	never
• Other	hourly	several times a day	daily	monthly	never

2. For what purpose do you use social media?
 - Personal life
 - Political life
 - In relation to employment outside parliament
 - Communicating with constituents
 - Attracting media attention
 - Keeping up with the latest news

3. Is this an important form of communication for you?
 - Yes
 - No

4. Do you use social media account(s) primarily to post information you want to share, or to see what other are posting?
 - I use it mostly to post information
 - I use it mostly to see what others are saying
 - It's about 50/50

5. How often have you received abusive or threatening messages through each of the following?

	Daily (1)	Weekly (2)	Monthly (3)	Several times a year (4)	Once a year (5)	Less than once a year (6)	Never (7)
Facebook (1)							
Instagram (2)							
Linkedin (3)							
MySpace (4)							
Snap chat (5)							
Twitter (6)							
E-mails (7)							
Letters (8)							
Phone calls (9)							
Face-to-face (10)							

6. What form(s) does this abuse/threatening behaviour take place, (highlight as many as appropriate)?
 - Posting of defamatory or false materials
 - Racial abuse
 - Sexual abuse
 - Abuse on political grounds/beliefs
 - Abuse on religious grounds/beliefs
 - Other (please specify)

7. Have you been threatened with any of the following?
 - Death
 - Physical violence
 - Rape
 - Physical violence to friends or family
 - Reputational damage
 - Other

8. What do you think is the *primary* reason for your receiving abuse/threats?
 - Political beliefs
 - Sexual orientation/gender
 - Racial
 - Brexit
 - Other (please specify)

9. Have the number of threats/abusive messages that you have received increased over the last two years?
 - Yes
 - No
 - Uncertain

10. What is the longest that a campaign of abuse/threats by a single individual has lasted?
- Less than a day
 - < day
 - <1 week
 - < 1 month
 - Years
 - It's still happening
11. Was most of the abuse/threats from anonymous or names correspondents?
- Named
 - Anonymous
 - Roughly equal
12. What sex was the person in question?
- Male
 - Female
 - Gender fluid
 - Prefer not to say
13. Which of the following applies to how you deal with abusive/threatening messages?
- I read them in full
 - I read, but never respond
 - I read and sometimes respond
 - I read and regularly respond
 - Other (please specify)
14. Do you delete abusive/threatening messages?
- Yes
 - No
 - Sometimes
 - Other (please specify)
15. Do you block people from your social media?
- Yes
 - No
 - Sometimes
16. As a result of the behaviours in question, did you:
- Increase your security at home
 - Increase your security at work
 - Change your telephone number
 - Lose time off work
 - Reduce your social outings
 - Change your daily routine?
 - Experience changes in your close relationships?
 - Feel concerned about being at home alone?

- Feel fearful for your personal safety?
- Feel fearful for the safety of those close to you?
- Feel frightened you may be physically assaulted?
- Other (please specify)

17. As a result of the behaviors, did you ever seek help or advice from others?

- Family, friends or work colleagues
- local police
- Palace of Westminster police
- The Sergeant-at-Arms/Black Rod
- The Whips
- The Home Office
- Personal protection officers
- A lawyer
- Health professionals
- Security company
- Independent Consultants
- Other (please specify)

18. As a result of these behaviors did you feel frightened or fearful at the time?

- Not at all
- A little
- Moderately frightened or fearful
- Very frightened or fearful
- Extremely frightened or fearful
- Prefer not to say

19. Has this caused you:

- Mental or emotional stress
- Problems with your friends or family
- Damage to your reputation
- Problems with romantic relationships
- Problems at work
- Prefer not to say
- Other (please specify)

20. Political affiliation

- Conservative Party
- Co-operative Party
- Democratic Unionist Party
- Green Party
- Labour Party
- Liberal Democrats
- Plaid Cymru
- Scottish National Party
- Sinn Fein
- Social Democratic and Labour Party
- UK Independence Party
- United Democratic Party
- Ulster Unionist Party
- Prefer not to say
- Other (please specify)

21. Do you identify yourself as:

- Male
- Female
- Transgender

22. How old are you?

- 25 years or under
- 26-35 years
- 36-45 years
- 46-55 years
- 56-60 years
- 60-69 years
- 70-79 years

23. Are you prepared to be contacted to discuss your experiences or opinions further, in strictest confidence?

- Yes
- Maybe
- No

24. If you have responded yes, please leave your contact details

- Name
- Email
- Contact number

- A substantial proportion of UK MPs report being the victims of online trolling
- Trolling is most common on the twitter platform
- Male MPs report more concerns over reputational damage
- Female MPs report more personal concerns, e.g., safety, risk to family, social life

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