Soc (2017) 54:138–149
DOI 10.1007/s12115-017-0114-0

SOCIAL SCIENCE AND PUBLIC POLICY

Cyber-Extremism: Isis and the Power of Social Media

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Published online: 15 March 2017

Abstract The current crises in Syria has led to a number of Britons travelling abroad to fight with groups such as Isis. Capitalising on this growth, Isis are now increasingly fighting an online cyber war, with the use of slick videos, online messages of hate and even an app that all aim to radicalise and create a new generation of cyber jihadists. These modern day tools are helping Isis spread their propaganda and ideology to thousands of online sympathisers across the world. Indeed, the group has actively been using social media sites such as Twitter, Facebook and YouTube to recruit new would be members. This is being done through images and the streaming of violent online viral videos filmed and professionally edited that are targeting young and impressionable people. Portraying a glamorised and 'cool' image, Isis fighters are beginning to act as the new rock stars of global cyber jihad. The Internet therefore is becoming the virtual playground for extremist views to be reinforced and act as an echo chamber. This study analysed 100 different Facebook pages and 50 Twitter user accounts which generated over 2050 results and helped the author create a typology of seven key behaviour characteristics and motivations. The findings in this study confirmed the author's original hypothesis, i.e. online hate is being used by groups such as Isis for a variety of reasons such as recruitment and propaganda. Moreover, this material is co-ordinated and controlled by Isis as a means for publishing and sending out key messages.

Keywords Isis · Cyber-terrorism · Extremism · Terrorism · Radicalisation · Online · Social media

Currently, there are estimated to be at least 750 Britain's who have travelled to Syria to fight against President Assad's forces (at the time of writing) (Whitehead, 2014). Within this heightened atmosphere, a hydra global insurgency from a plethora of extremist groups in Syria and Iraq, such as Isis, have emerged that all have links to an extremist narrative (International Centre for the Study of Radicalisation, 2013). As people continue to travel and fight with groups such as Isis, the organisation has also begun a campaign of cyber jihad, whereby they are using the Internet and social media sites to target young and impressionable people (Berger, 2014). Indeed, the threat groups such as Isis pose online has meant that the UK Government are in a continuous battle to remove online extremist material. The UK Government have currently removed 15,000 items of 'jihadist propaganda' (ITV news, 2014). This includes an online recruitment video, entitled: '*There's No Life Without Jihad*' which featured three British fighters glamorising and encouraging people to come and fight for Isis. The video, however has reappeared and was available on YouTube and to date has 4, 289 views (at the time of writing) (Al Hayat Media Centre, 2014).

Similarly, other videos have appeared online where the leader of Isis, Abu Bakr Al-Baghdadi has called for 'Sunni youths' to fight for Isis. He stated that: "I appeal to the youths and men of Islam around the globe and invoke them to mobilise and join us to consolidate the pillar of the state of Islam and wage jihad against the rafidhas (Shia), the safadis of Shi'ites" (New Delhi Times, 2014). Isis tactics of using social media platforms to send out sound bites in this manner, allows them to have direct communication with a wider global audience and gives them a platform they could simply not reach if

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they were attempting to recruit people face-to-face (Denning, 2010). These slick and well equipped videos are able to entice those vulnerable to this extremist ideology. As a result, what we are witnessing is Isis being able to tap into the minds of young and impressionable people who are more likely to be watching YouTube and using Facebook and Twitter (Awan, 2013). Moreover, this allows groups like Isis, a direct channel whereby they can play upon individual grievances and dissatisfaction that makes those vulnerable feel as though they are significant and important (Awan and Blakemore, 2012). They are then able to use these videos, tweets, Facebook posts and forums into online radicalisation tools, whereby they are able to glamorise 'extremism' and make it appear as though fighting with them is 'cool'.

This coupled with the excitement for many of these individuals can be used as a vehicle to create the myth that coming to join Isis will be an adventure and a once in a life time opportunity (Sekulow et al., 2014). This study examined 100 different Facebook pages, comments and posts and examined 50 different Twitter users which led to 2050 results in order to capture and contextualise the impact Isis was having on social media sites. Overall, the study found that Isis was playing a significant role in its use of social media as a platform to radicalise and recruit would be extremists.

Social Media Platforms Becoming a Tool of Terror

Social media platforms have a huge global reach and audience, with YouTube boasting more than 1 billion users each month. This breaks down into 6 billion hours of video that are being watched each month and 100 h of video are uploaded to YouTube every month (YouTube Statistics, 2014). Similarly, Twitter has on average 350,000 tweets being sent per minute and 500 million tweets per day (Twitter, 2014), whilst Facebook remains the largest social media network with 500 million active users and 55 million people sending updates (Fiegerman, 2014). As this study will show, Isis have been using both platforms as magnets that have attracted thousands of views, comments, forums and posts. For example, through the use of videos posted on YouTube, it began its' one billion campaign, which called upon Muslims to join Isis. The videos attracted huge audiences and were accompanied with the words: 'Proudly support the Muslim cause' (Irshaid, 2014). The breadth and length of the videos were also broadcast and shown in different languages and countries such as Algeria, Libya and Egypt, thus reflecting the transnational appeal of Isis. The videos specifically called for; 'young men and Muslims in various parts of the world to fight for Isis' (see Fig. 1).

The Isis social media nerve centre is its Al Hayat Media Centre which is sending many of these messages which reveal the propaganda tools it is using. A number of these videos also depict Isis as fighters with a 'moral conscious' and show them helping protect civilians. Some of the videos also show Isis members visiting injured fighters in hospitals and offering children sweets (see Fig. 2). These videos also form part of a wider series called 'Mujatweets' and are produced with high quality HD and powerful imagery. Indeed, this is reinforced by online podcasts made by British Isis fighters on the ground, such as Abu Summayyah al-Britani. Speaking from an Internet cafe in northwest Syria, Abu Summayyah describes in detail the nature of the conflict. He states that: "We have been successful so far in pushing back the regime" and also described fighting in Syria as better than playing Call of Duty (Lucas, 2014). Much of the Isis literature also uses motivational powerful themes which aim to appeal to the youth and at the same time allow groups such as Isis to recruit and maintain its propaganda machine (Richards, 2014).

Furthermore, Isis had released a free to download app which kept users updated with the latest news from the organisation. The app entitled: 'The Dawn of Glad Tidings' (see Fig. 3) was promoted online and was available on the google android system, before it was detected and suspended. The app once downloaded allowed users to see and monitor tweets, links, hashtags, images, videos and comments posted on their specific accounts. Most of the content was regulated by Isis's social media arm (Chasmar, 2014). The paper, below will now examine, how the use of cyber-terrorism and social media have converged in this virtual space for groups such as Isis.

Cyber-Terrorism and the Power of Social Media

Both the use of cyber-terrorism through the Internet and social media have been used by extremist groups in order to manufacture a process of online hate. In the case of many of the tweets and videos analysed in these cases, the Internet and social media sites act as a knowledgeable database on how

Fig. 1 YouTube videos of the one billion campaign

Fig. 2 Video showing Isis militants giving sweets to children

to promote violence as a strategy through the social learning theory (Freiburger and Crane, 2008). This theory asserts that individuals learn deviant behaviour from other groups, which may lead to extremist learning that is categorised by association, definitions, differential reinforcement, and imitation. They argue that mechanisms of the social learning theory are used by terrorist groups on the Internet as a tool to facilitate attacks and recruitment. This perspective of deviant behaviours offers a thought provoking insight into the processes that transform naïve individuals like Andrew Ibrahim into violent extremists (Desmond, 2002). It also shows how social media sites online have been used by Isis to create a terror network.

Indeed, Freiburger and Crane refer to a European case study where Peter Cherif was recruited by Al-Qaeda over the Internet through a similar learning process (Powell et al., 2005). They argue that if groups become marginalized they become more susceptible to using the Internet for terrorist purposes. The use of social constructionism as a mechanism to understand the competing definitions of cyber-terrorism is crucial in getting a better understanding of the phenomena. Clearly, social practices and social behaviour change with time and thus our understanding of online extremism will also evolve. Within this context social constructionism offers both criminologists and sociologists a means to examine the various social processes that emerge when looking at interpretations of online extremism (Felson, 2002).

McKenna and Bargh (1998) research suggests cyber space and terrorism have converged thus allowing terrorists to use the Internet for terrorist purposes. As a result of such conflicting opinion there is a real and present fear, which critics argue means the Internet and social media sites, have become a safe haven for potential extremists to 'groom' vulnerable people. Moreover, Tsfati and Weimann (2002) argue that terrorist groups are using the Internet to groom vulnerable individuals by justifying violence against innocent civilians as a retribution for the invasions and crimes committed against Muslims across the globe (Verton, 2003). They have a high level of technological knowledge, spending endless hours honing their skills. They simply enjoy the challenge of trying to get into cyberspace. Their aims are not the same as extremists (Furnell and Warren, 1999).

Klausen (2015) argues that social media sites are being used by Isis and others as a global cyber war tactic in places like Syria. In Klausen's (2015) study of social media networks, Klausen (2015) found that Twitter was being used by Isis members as a means to create an illusion that the group was more powerful than it actually was. This was being done, as this paper has found through Twitter accounts and daily feeds as a means to whip up support. Indeed, in a previous study by Klausen et al. (2012) they also found that Jihadist groups were using YouTube as a means for propaganda purposes. They examined the group, Al-Muhajiroun's YouTube Propaganda Campaign and found that the group were using YouTube media channels to politicize support and create powerful terror networks.

Recruitment and Propaganda in Cyberspace

Terrorist's use of social media and the Internet to pursue their ideological aims is well documented. This includes terrorist groups such as Isis who are using the Internet and social media sites, as a tool for propaganda via websites, sharing information, data mining, fundraising, communication, and recruitment (Conway, 2003). For Weimann (2004), however it means terrorists, using the Internet for psychological warfare, publicity, propaganda, fundraising, recruitment, networking, sharing information and planning (Lachow and Richardson, 2007; Whine, 1999). Recruiters therefore may use more

Fig. 3 The Isis App

interactive Internet technology (Kohlmann 2008; 2006) to go through and use online chat rooms and cyber cafes (Furnell and Warren, 1999), therefore looking possibly for enlisting support from vulnerable people. Marc Sageman states that this form of interaction and chat rooms helps build ideological relationships and are a key tool in radicalising young people (Sageman, 2008). Schmid (2005), argues that online terrorism, therefore has become the new psychological warfare and Arquilla and Ronfeldt (2001) make the case that terrorist groups are now using online networks to create and cause hostile virtual environments.

The nature of participation on the Internet and participation in online discussion via social media is the new political activism. This is the process of turning to political violence is an active one, and not a passive one. Indeed, following the murder of Lee Rigby in Woolwich, the British Home Secretary, Theresa May was quick to identify the Internet as a potential source for radicalisation. She stated that: "There is no doubt that people are able to watch things through the internet which can lead to radicalisation" (Cited by Wintour and Jones in the Guardian, 2013). As a result, the UK government has announced a new taskforce called TERFOR, which will examine ways of restricting what people can see on the Internet. The British government is also considering a new Communications Data Bill (at the time of writing) which it hopes will allow the UK government, the power to filter extremist content and the flow of content and work more closely with Internet Service Providers in helping remove material which is considered to be inciting people to commit acts of terrorism or violent extremism (Kohlmann, 2006).

Social Media: Theoretical Considerations

The Social cognitive theory, purported by Bandura (2001) provides us with some important points to consider with regards, how online communication can be affected by the social environment. According to Bandura (2001), the use of this helps inform groups and creates 'motivating' factors. Bandura (2001: 265) states that: "social cognitive theory provides an agentic conceptual framework within which to examine the determinants and mechanisms of such effects. Human behavior has often been explained in terms of unidirectional causation, in which behavior is shaped and controlled either by environmental influences or by internal dispositions."

Within the construct of Isis motivation and behaviour, the group have been proactive in exploiting the online environment and are using worldwide events such as the crises in Iraq, to formulate ideas. For the social cognitive theory to work here, we see how members of groups can act as producers within an online social environment. Bandura (2001: 267) argues that: "An extraordinary capacity for symbolization provides humans with a powerful tool for comprehending their environment and creating and regulating environmental events that touch virtually every aspect of their lives. Most external influences affect behavior through cognitive processes rather than directly." These use of emotional factors are symbols of how Isis and other online hate groups can also transform and galvanise online groups and transfer power of the environment to create cognitive models of judgement. Meyrowitz (1985) makes the case that electronic media has meant that the way in which we interact with each other has changed over time and that the Internet therefore has an impact on social behaviour. Moreover, Meyrowitz (1985) argues that these online behaviours are determined by different stages of online socialization. In the case of the behaviours noted in this study, than groups such as Isis play upon this identity crises as a means to create support. Meyrowitz (1985: 7) states that: "…electronic media have increasingly encroached on the situations that take place in physically defined settings. More and more, the form of mediated communication has come to resemble the form of live face-to-face interaction." This clearly is the case when examining how groups such as Isis have used the power of social media to construct different recruitment patterns.

Lietsala and Sirkkunen (2008) argue that the power of social media, therefore has meant we are now producers as opposed to simply the audience, which means that we are taking a pro-active role in our interactions on the Internet. Furthermore, Pennebaker and King (1999) argue that language on social media sites can be used to create profiles. Selfhout et al. (2010) argues that social networks are built upon by these personality traits and friendships that are created on social media. By using the big five personality model which consists of five personality factors, i.e. openness, conscientiousness, extraversion, agreeableness, and neuroticism. Within this paradigm as discussed above groups such as Isis are able to use social media to create key friendships by selecting online 'friends' with users. Based upon the typology the author has proposed in this study, then clearly we are seeing a level of the five personality factors playing a role in particular with regards the 'openness' and 'agreeableness' traits which show a selection of online friendships emerging on social networks by Isis (discussed in more detail below).

Moreover, Goodboy and Martin (2015) argue that such groups can build profiles upon certain traits. Their study examined the relationships between the Dark Triad personality traits and self-reported cyberbullying behaviours. They found three trait behaviours as being prominent in such cases, namely; Machiavellianism, Psychopathy and Narcissism. They state that: "…multiple regression analysis revealed that of the three Dark Triad traits, psychopathy emerged as the unique predictor of cyberbullying. These findings reinforce extant research suggesting that personality traits are important predictors of computer-mediated behavior" (Goodboy and

Martin (2015: 1). Similarly, this paper makes the case that Isis members act in a cybermob mentality, and are also using social media to cyberbully people through personal interaction with online members. Goodboy and Martin (2015: 1) argue that cyberbullies attempt to "harass, denigrate, impersonate, or ostracize others" and "spend a considerable amount of time online and engage in risky online behaviors…For instance, cyberbullies tend to have personalities that lack self-control and sensitivity; they tend to be higher in psychoticism and verbal aggressiveness". As this study found there were some clear overlaps with those aggressive behaviours and how members online were using videos and posts to coordinate aggressive responses and enter into hate-filled dialogue.

Contena et al. (2015) examined the issues around self-disclosure and how they are communicated on Facebook. Citing (Krasnova et al., 2009; Krasnova et al., 2010; Krasnova & Veltri, 2011) they examined how a proposed comprehensive conceptual model of online self-disclosure is used on social media sites, such as Facebook. They named a number of factors such as perceived benefits, privacy costs, trust factors, perceived control over information and awareness as being key instruments of self-disclosure indicators on Facebook. Joinson (2000) also makes the case that online groups are aiming to balance self-disclosure in computer-mediated communication with visual anonymity. Similarly, Christopherson (2007) argues that anonymity affords online protection for individuals and groups on social media. This level of anonymity, according to Christopherson (2007) can influence the way individuals behave within online groups. This forms part of social psychological concepts within online groups and includes the notions of 'bystander apathy' and 'social loafing.' This level of anonymity online was also described by Zimbardo (1969) as the deindividuation theory. This means that anonymity and personal social environmental factors can influence online behaviour.

Dubrovsky et al. (1991) argue that face-to-face communication and electronic communication can vary in different groups depending on the social structure. Similarly, Hayne and Rice (1997) argue that anonymity in group support systems is used by groups to create an online presence whilst McKenna and Bargh (1998) make a compelling case that such anonymity can actually also relate to strong group identity. According to McKenna and Bargh (1998) these identities are built upon a sense of self-esteem and self-belonging. This means groups find and share personal experiences.

Isis on Twitter

Social media sites such as Twitter have also been used by Isis as a means to recruit would be jihadists (Klausen, 2015). They have been used to not only recruit people but to create an ideological stance that aims to intimidate and cause fear. Despite Twitter only allowing 140 characters to post a message, these accounts will send out posts, religious declarations and small bite size comments that maximise the appeal of the group. The aim of using and broadcasting messages on Twitter, means that the group are able to create a climate of fear and anxiety. Moreover, this also allows Isis them to reinforce their messages and use social media sites like Twitter to act an echo chamber.

For example, Isis fighters have been reported to have been using Twitter to post pictures of beheadings. In one such case, Isis sympathisers and fighters were using the hashtag #WorldCup with the accompanying words: "This is our ball…it has skin on it". For Isis's media wing Al-Furqan, Twitter therefore allows them to be able to provide messages with speed and reinforce that narrative with retweets to thousands of followers. Twitter therefore acts as a megaphone by which Isis are able to send out live updates of fighters tweeting about what it feels like to be in Syria. Ultimately, the aim for Isis is to win hearts and minds and maintain the organisations appeal for young people. Katz (2014) states that Twitter allows Isis to maintain a strong global focus that stretches beyond Britain and Europe. Katz states that:

> "In addition to its general and local pages, ISIS is supported by approximately thirty other online media groups. For example, the al-Battar Media Group, with 32,000 followers, works constantly to mobilize Twitter members to support ISIS by translating ISIS releases and by independently producing media..."Moreover, Katz argues that (2014): "The Billion Muslim campaign has generated over 22,000 posts within four days since its launch on June 13, 2014. On June 20, 2014, Twitter users began distributing images displaying words of encouragement or the phrases "All Eyes on ISIS" and "We are all ISIS" in Twitter posts that feature the hashtag "#AllEyesOnISIS." The hashtag now totals over 30,000 tweets." Whilst Twitter has been actively suspending many of the Isis accounts, Isis continues to have an online presence and as this study will show, are using this to intimidate and radicalise people.

Isis sympathisers, fighters and groups have also begun to create multiple Twitter accounts such as the al-I'tisam page which are being used to promote the Isis brand. Furthermore, there are a number of prominent accounts such as the @Minbar_s, @hashtag_isis, @mghol1122, @Nnewsi, @alfurqan2013, @raqqa98, @w_raqqa, and @ShamiWitness accounts (see figure 4 for selection of tweets) which have transformed Twitter into an Isis megaphone. Most of the accounts have been giving an update on the group's activities and also promoting the organisation brand, despite many of them now being removed (Berger, 2014).

A number of the Twitter accounts that have been examined and are used to propagate Isis have now been removed or

Table 1 Offender behaviour characteristics

Type	Characteristics	Cases on Twitter	Cases on Facebook	Total No of Cases
Cyber Mobs	Using social media platforms to create a mob mentality and urging others to fight for the Isis goal. This is done through group posts, videos and comments of hate directing groups of Muslim's to fight. Often personified through retweets, likes and views of specific Isis propaganda materials.	78	55	133
Loners	Often done through individual posts and comments. This individual is someone who is attracted to the Isis campaign but clearly is exposed to individual grievances and has a lone mentality.	51	65	116
Fantasists	Someone using social media platforms to fantasise over the Isis movement. In particular, these individuals have blurred the lines between reality and fiction and are making direct plea's to fight for Isis.	45	94	139
Thrill Seekers	People who are promoting Isis propaganda through videos and posts and forums. Indeed, some of these individuals claim to be directly using the Internet for online extremist purposes. These individuals are describing the sense of adrenaline rush they are receiving by watching and partaking in fighting on the battlefield whether online or offline.	85	98	183
Moral Crusaders	These individuals are talking about the moral duty to fight. Many of these individuals are also constructing arguments based on ideology and theology as a means to promise people external rewards.	140	95	235
Narcissists	These people are using political, foreign policy and individual grievances as a means to whip up a climate of revenge seeking and wanting to fight for the Isis mission and goals.	166	104	270
Identity Seekers	Mostly this is users who appear to be seeking some form of identity. Primarily people searching for some form of masculinity and therefore the Isis recruitment drive appeals to them. This applies to males and females.	87	101	188

suspended. Indeed, out of all the Twitter accounts propagating for Isis, the @ShamiWitness Twitter account has been one of the most successful and active accounts with over 17,700 followers. According to a Channel 4 news investigation the tweets, had been viewed 2 million times each month, with at least two thirds of all foreign fighters on Twitter also following this account. However, following a recent Channel 4 investigation, the identity of @ShamiWitness was revealed and the Indian police arrested a man named as Mehdi Masroor who is thought to have been @ShamiWitness. Despite this, supporters of the Islamic State demanded his release through the use of the #FreeShamiWitness hashtag. The account has since been reactivated (Channel 4 News Report, 2014).

The Research Project

This study examined the role of Isis on social media by examining two main platforms, namely Facebook and Twitter. In doing so, this paper will be examining how, this medium is being used to create an online space where radicalisation can occur through online communicative technology and cyberspace. This is particularly important as an online extremist narrative and presence can act as an echo chamber whereby extremist thoughts are populated, redistributed, disseminated and reinforced. This study will show that there is a need for government and policy makers to re-examine the role of social media and the impact it may be having upon the online radicalisation process.

Methodology and Findings

This study examined 100 different Facebook pages, comments and posts regarding Isis and the role of the Islamic State and examined 50 different Twitter users which led to 2050 results. Overall, the study found that whilst there was a strong online backlash against Isis, that there too was also a pervading sense of online propaganda and an extremist narrative that was leading in some cases to the glorification of the

Table 2 The main tools for propaganda. *recruitment drivers,* type of engagement %

Types	Types of engagement	No of cases
Videos	Extremely dangerous and are used to show online beheadings and online media campaigns.	66
Chatrooms	Using chatrooms or message forums and boards to engage with wider audiences.	21
Websites	The use of visual and written material to depict Isis in a positive light.	12
Images	Use of visual and written communications depicting a 'them vs us' war type mentality and culture. This is also done through the use of leaflets and handbooks.	78
Web links, retweets, likes and hashtags	The use of social media to reaffirm and create normalised behaviour.	96

Fig. 4 Selection of tweets collected

role of Isis. With this in mind, the author created a typology of seven offender behaviour characteristics, which helps define and categorise those types of behaviour online. These include; *the Cyber Mobs*, *Loners, Fantasists, Thrill Seekers, Moral Crusaders, Narcissists and Identity Seekers* (see Table 1). These offender behaviours are situated and divided into different online means of promoting Isis propaganda and hate. This is done through videos, online merchandise, chatrooms, forums, websites and comments (see Table 4).

The research questions in this article included:

- What, if any impact was Isis having on social media sites?
- What types of recruitment strategies are Isis using online?
- How is Isis being viewed on Facebook and Twitter?

This article used a mixed methodology as part of a wider content analysis utilizing qualitative data gathering techniques embedded within grounded theory. The Facebook pages and Twitter accounts were analysed between January 2013 and December 2014 and utilised the electronic database NVivo. By using the software system NVivo, the author was able to collate 'high frequency' words and patterns that are directly related to Isis. Comments and all posts were then compiled into a large word cloud. The word cloud was analysed using a word frequency count which was created to explore core issues and recurring themes around Isis on Facebook and Twitter (see Table 2, for a full list of key terms and frequencies that appeared).

The reason for choosing Twitter and Facebook was because they remain important social media platforms that allow people to stay up to date with the news of people in a way that makes them more accessible and stay connected through the exchange of quick and frequent comments and posts. They also through likes, retweets and views are able to have a wide reach which makes them easier to access and allows groups such as Isis to maximise their publicity. By focussing on the role of Isis on social media, I hope that this study will give us a better understanding of how social media sites in some cases can accelerate the online radicalisation process. Clearly, there are drawbacks to using and analysing data via social media sites. For instance, there are issues encountered in relation to anonymity and public and private posts. However, I hope this study has addressed

Fig. 5 Selection of Facebook pages**. (see** https://www.facebook.com/farhan.salahiron?fref=pb&hc_location=profile_browser https://www.facebook.com/pages/Al-Furqan-Media-Productions/1493347580908838?fref=ts https://www.facebook.com/profile.php?id=100008534373488&fref=pb&hc_location=friends_tab&pnref=friends.all https://www.facebook.com/profile.php?id=100007560136851&fref=pb&hc_location=friends_tab&pnref=friends.all https://www.oximity.com/article/Modern-Da-wa-By-Western-Mujahideen-On-1

SO MAKE SURE NOT TO LET THE PASSPORT GO OFF YOUR SIGHT EVEN FOR A SECOND. EVERYONE WANTS TO GET OVER WITH THE AIRPORT FORMALITIES AND GO HOME. SO BEING VIGILANT FOR AN EXTRA MINUTE WILL SAVE YOU A LIFETIME OF MISERY. BEST OF LUCK IN YOUR TRAVELS.

KINDLY SEND THIS TO AS MANY OF YOUR INTENDING TRAVELERS AND FRIENDS ACROSS THE WORLD REQUEST THEM TO CHECK THE PASSPORT AT THE CHECKING COUNTERS AND BEFORE LEAVING THE AIRPORT.

some of those concerns with the use of electronic software, key terms used and the overall sample size.

In order to carry out a Facebook and Twitter analysis, I searched for outputs using the terms Syria *AND* Isis, ISIL *AND* Islamic State, Syria *AND* Abu Bakr al-Baghdadi and Iraq *AND* IS. These searches generated over 2050 results. These searches were then used to examine 100 Facebook pages and 50 Twitter users. Following this, I examined each platform to try and better understand how Isis were using both spaces to target and radicalise young people to their cause. Some of the most common reappearing words used to describe Isis were then examined. As noted above, whilst there was clearly an online backlash opposing the Isis ideology, there was also the Isis recruitment tool targeting people online. The study also made the use of electronic software NVivo, because it allowed the author to collate and identify comments, posts and patterns that emerged. All the posts, tweets and comments were imported into NVivo and I was able to analyze the comments with the use of visualization tools such as the NCapture tool, which is a web browser extension that allowed me to quickly and easily capture web content via social media data for further analysis.

Discussion

Social media sites such as Twitter and Facebook are extremely powerful platforms, whereby people can stay connected and keep up to date with key news feeds and updates. Equally, they have become popular platforms for groups like Britain First, the English Defence League and now Isis who have used it to create a hostile environment, whereby people can be radicalised and targeted because of what they believe in. This study found 1, 264 specific incidents of Isis propaganda and hate related messages which could be construed as inciting violence and actual offline physical threats.

In particular, the word cloud frequency helped the author obtain key words that were being used to depict Isis. For example, from the top 20 words used, there were some key words that stood out as having direct influence over the recent actions of Isis recruitment propaganda. They included the words; 'Brothers' 'rise up', 'Claim' 'Victory'; 'Haya', 'Jihad', 'Rush' and 'Battlefield' (see Table 3 for a full breakdown of terms). What was telling was how these words were accompanied by images, videos and texts that were posted following high profile incidents. For instance, after the Isis beheadings (see Figs. 4, 5 and 6 below-word cloud of terms).

The use of the terms 'rise up' and 'victory' were also used in relation to Muslims as a justification and 'call for action'. For example, a large majority of words were referenced with accompanying text such as 'IS', 'Islamic State', 'Rise Up' and 'Let's go for Jihad'. Below is a small sample of examples found via Facebook and Twitter:

In December 2014, Runa Khan, from Luton, was arrested and charged for inciting terrorism offences in Syria, after posting a picture of a suicide vest and sending the details to an undercover police officer. During her sentencing, the court's held that these pictures could be intended to be used to radicalise people. Runa Khan argued that these pictures did not mean she was an extremist. She stated that: "And when I spoke about suicide missions, I only spoke about it because it's a much feared war tactic, which should only be used in a battlefield, not anywhere else." After she was arrested and charged Commander Richard Walton, who is the head of the Metropolitan Police's counter terrorism unit, argued that Runa Khan was using social media as a 'tool for terrorism'.

Within this climate, this study has been able to assess and propose seven types of offender characteristics who have been engaged with Twitter and Facebook as a means to radicalise and target communities, either through specific pages, videos or comment's and posts. These seven types are the; *Cyber Mobs*, *Loners, Fantasists, Thrill Seekers, Moral Crusaders, Narcissists and Identity Seekers*. This typology is intended as a starting point for a framework around Isis on social media (see Table 1). The majority of people involved in these acts were Males (90%) and Females (10%) (see Table 4). Whilst, a number of the individuals were based in the UK, there were also a number of online users who were identified as being from the United States; Australia; Pakistan; Indonesia; Egypt; Germany; Canada; Saudi Arabia, Turkey and Libya (see Fig. 7 for map of users and hotspots identified).

Indeed Lacus and Ceron have examined social analysis of Isis and found that support for Isis was mainly from Arab-

Fig. 6 Word Cloud representing most common reappearing words

speaking social media users (Lucas, 2014). This included users based in Belgium, Britain, France and the US. They also found that overall 92% of tweets, blogs and forum comments were hostile to the militants. Forty-seven per cent of studied tweets and posts from Qatar, 35% from Pakistan, 31% from Belgium and almost 24% of posts from UK and 21% from the US were classified as being supportive of the jihadist organisation compared with just under 20% in Jordan, Saudi Arabia (19.7%) and Iraq (19.8%) (Lucas, 2014).

Interestingly, these seven types of offender behaviours are situated across those who directly sympathise with Isis and those people who are actually broadcasting the Isis propaganda machine via different locations. They include those individuals who claim to be fighting alongside Isis group members. Moreover, as this typology has shown, a high proportion of people fell into the 'thrill seekers' and 'moral crusaders' types which does indicate that those people were going or wanting to fight with Isis (Table 5).

Clearly, Isis has been using social media sites such as Twitter and Facebook as propaganda tools that allow them to send out messages, posts and updates. They have been particularly successful at using those sites to create a 'them vs us' narrative. This is amplified through retweets and conversations after each message is posted. Isis are using the Internet through a range of recruitment methods, this includes through the use of pictures, images and words. For example, in the mapping exercise it was clear that some common words such as 'brothers rise up' and 'claim victory' were common reappearing words for many individuals in different countries. Furthermore, through the use of Facebook, Isis were using merchandise as a means to sell the Isis brand and act as a recruitment tool.

Interestingly, Isis on both Facebook and Twitter have been viewed with mix results. In a large amount of cases examined in this study, Isis were condemned by most users as a brutal and 'oppressive' group that did not represent Muslims and Islam. This was personified in the #NotinMyName hashtag that was used as a means to express how Muslim communities were angry at the actions of Isis. However, as this study has shown, there were also a number of groups and individuals that were willing to accept the Isis narrative, that they were victims. And some individuals cited various issues that Isis 'did not exist' and that 'they are fighting a global war'.

In this study, five distinct categories were established after analysing the different methods used by Isis online for propaganda purposes. As noted previously, they included; 1) videos; 2) chatrooms; 3) websites; 4) images and finally the use of hashtags, retweets and likes (see Table 2) for a full breakdown.

Table 4 Gender of perpetrator

Male	90%
Female	10%

Table 3 Top 20 collocation network of key words across word cloud

Words
Muslim
Islamic State
State
IS
Extreme
Fight
Terrorism
Kill
ISIL
Khalifah
Syria
Brothers Rise Up
Claim Victory
Haya
Extremists
Haya alal-Jihad
Mujaheddin
Rush to the Battlefield
Killing
Slaughter

Conclusion

Isis tactics of propaganda, recruitment and radicalisation all emerge within the online virtual space. The power of social media for groups such as Isis is immense as demonstrated when the Iraqi government blocked access to many social media accounts, because they were being used to plan attacks. As Isis continue to use social media sites for such purposes there are important questions about understanding the motivations and actions of Isis fighters online. This study has shown

Table 5 Country of residence

United Kingdom	20
United States	15
Australia	33
Pakistan	31
Egypt	28
Canada	15
Saudi Arabia	12
Turkey	18
Libya	22
Germany	11

that seven key characteristics are emerging about the types of people who are likely to be sympathisers to the Isis narrative, as well as those on the ground fighting for the organisation. From the collection of data analysed it does appear that in some cases these individuals are seeking an adrenaline rush and are looking for excitement. This leads to different people with various aims and views. Clearly, the situation in Syria is developing fast and the role of the police and other agencies is trying to keep up-to-date, arrest and prosecute people but at the same time ensure that they understand the power of social media for groups such as Isis.

Further Reading

Al Hayat Media Centre 2014. There's no life without Jihad. *YouTube*, (June 19) Available at: https://www.youtube.com/watch?v=sFltVWWBUYE Accessed 22 Dec 2014.

Arquilla, J., & Ronfeldt, D. 2001. *Networks and Netwars*. The Future of Terror:Crime and Militancy, Rand Corporation.

Awan, I., & Blakemore, B. 2012. *Policing cyber hate, cyber threats and cyber terrorism*. London:Ashgate Publishing.

Awan, I. 2013. Debating the meaning of cyber terrorism: issues and problems. Internet journal of criminology. Available at: http://www.internetjournalofcriminology.com/Awan_Debating_The_Term_Cyber-Terrorism_IJC_Jan_2014.pdf. Accessed 7 Jan 2014.

Bandura, A. 2001. Social cognitive theory of mass communication. *Media Psychology*, *3*(3), 256–299.

Berger, J. M. 2014. How ISIS games twitter. The Atlantic. Available at: http://www.theatlantic.com/international/archive/2014/06/isis-iraq-twitter-social-media-strategy/372856/. Accessed 10 Dec 2014.

Channel 4 News 2014. *IS supporters demand police #FreeShamiWitness after arrest.* Accessed 22 Dec 2014.Available at: http://www.channel4.com/news/free-shami-witness-mehdi-masroor-biswas-india-is-isis-isil

Chasmar, J. 2014. ISIL using twitter app 'Dawn' to keep jihadists updated. In *Washington times* Accessed 20 Dec 2014.Available at: http://www.washingtontimes.com/news/2014/jun/18/isil-using-twitter-app-dawn-keep-jihadists-updated/

Christopherson, K. 2007. The positive and negative implications of anonymity in internet social interactions: "on the internet, nobody knows You're a dog". *Computers in Human Behavior*, *23*, 3038–3056.

Conway, M. 2003. What is cyberterrorism? The story so far. *Journal of Information Warfare*, *2*(2), 33–42.

Contena, B., Loscalzo, Y., & Taddei, S. 2015. Surfing on social network sites: a comprehensive instrument to evaluate online self-disclosure and related issues. *Computers in Human Behaviour*, *49*, 30–37.

Dubrovsky, V. J., Kiesler, B. N., & Sethna, B. N. 1991. The equalization phenomenon: status effect in computer-mediated and face-to-face decision-making groups. *Human–Computer Interaction*, *2*(2), 119–146.

Denning, D. 2010. Terror's web: how the internet is transforming terrorism. In M. Yar, & Y. Jewekes (Eds.), *Handbook of Internet Crime (pp. 194–212)*. Willan Publishers.

Desmond, P. 2002. Thwarting cyberterrorism. *Network World.*, *19*(7), 72–74.

Felson, M. 2002. *Crime and everyday life* (3rd ed.,). California:Sage.

Fiegerman, S. 2014. *Facebook Messenger now has 500 million monthly active users.* Accessed 22 Dec 2014.Available at: http://mashable.com/2014/11/10/facebook-messenger-500-million/

Freiburger, T., & Crane, J. 2008. A systematic examination of terrorist use of the internet. *International Journal of Cyber Criminology*, *2*(1), 309–319.

Furnell, S., & Warren, M. 1999. Computer hacking and cyber terrorism: the real threats in the new millennium. *Computers and Security*, *18*(1), 28–34.

Geltzer, A. 2008. Six rather unexplored assumptions about Al Qaeda. *Critical Studies on Terrorism, 1*, 393–403.

Goodboy, A., & Martin, M. 2015. The personality of a cyberbully: examining the dark triad. *Computers in Human Behaviour*, *49*, 1–4.

Hayne, S. C., & Rice, R. E. 1997. Attribution accuracy when using anonymity in group support systems. *International Journal of Human–Computer Studies*, *47*, 429–452.

Joinson, A. N. 2000. Self-disclosure in computer-mediated communication: the role of self-awareness and visual anonymity. *European Journal of Social Psychology*, *31*, 177–192.

International Centre for the Study of Radicalisation. 2013. Up to 11,000 foreign fighters in Syria; steep rise among western Europeans. Insight. Available at: http://icsr.info/2013/12/icsr-insight-11000-foreign-fighters-syria-steep-rise-among-western-europeans/. Accessed 22 Dec 2014.

International Centre for the Study of Radicalisation. 2014**.** #GreenBirds: Measuring Importance and Influence in Syrian Foreign Fighter Networks. Available at: http://icsr.info/wp-content/uploads/2014/04/ICSR-Report-Greenbirds-Measuring-Importance-and-Infleunce-in-Syrian-Foreign-Fighter-Networks.pdf. Accessed 22 Dec 2014.

Internet Haganah 2008. Portrait of rats. *Preparing to Drown. 10th*, (October 2008) Available at: http://internet-haganah.com/harchives/006420.html Accessed 15 Jan 2014.

ITV News 2014. *15 K items of jihadist propaganda removed from internet.* Accessed 11 Dec 2014.Available at: http://www.itv.com/news/update/2014-06-24/15k-items-of-jihadist-propaganda-removed-from-internet/

Irshaid, F. 2014. How Isis is spreading its message online. In *BBC news* Accessed 22 Dec 2014.Available at: http://www.bbc.co.uk/news/world-middle-east-27912569

Juba pictures. 2000. Available at: http://www.blackflag.wordpress.com/2007/07/19/juba-the-baghdad-sniper-video/, http://blackflag.wordpress.com/2007/07/19/juba-the-baghdad-sniper-video/. Accessed 10 Feb 2014.

Kohlmann, E. F. 2008. Al Qaida's MySpace: terrorists recruitment on the internet. *CTC Sentinel*, *1*, 2.

Kohlmann, E. 2006. The real online terrorist threat. *Foreign Affairs*, *85*(5), 115–124.

Katz, R. 2014. Follow ISIS on twitter: a special report on the use of social media by jihadists. In *SITE intelligence group* Accessed 22 Dec 2014.Available at: http://news.siteintelgroup.com/blog/index.php/entry/192-follow-isis-on-twitter-a-special-report-on-the-use-of-social-media-by-jihadists

Kaplan, A., & Haenlein, M. 2010. Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, *53*(1), 59–68.

Klausen, J., Barbieri, E., Zelin, A., & Reichlin-Melnick, A. 2012. The YouTube jihadists: a social network analysis of Al-Muhajiroun's YouTube propaganda campaign. *Perspectives on Terrorism*, *6*(1).

Klausen, J. 2015. Tweeting the Jihad: social media networks of western foreign fighters in Syria and Iraq. *Studies in Conflict & Terrorism*, *38*, 1–22.

Krasnova, H., & Veltri, N. F. 2011. Behind the curtains of privacy calculus on social networking sites: The study of Germany and the USA. In Wirtschaftsinformatik Proceedings 2011, paper 26.

Krasnova, H., Kolesnikova, E., & Guenther, O. 2009. "It won't happen to me!": Selfdisclosure in online social networks. In AMCIS 2009 Proceedings, Paper 343.

Krasnova, H., Spiekermann, S., Koroleva, K., & Hildebrand, T. 2010. Online social networks: why we disclose. *Journal of Information Technology*, *25*(2), 109–125.

Krasnova, H., Veltri, N. F., & Günther, O. 2012. Self-disclosure and privacy calculus on social networking sites: the role of culture. *Business & Information Systems Engineering*, *4*(3), 127–135.

Lachow, I., & Richardson, C. 2007. Terrorist use of the internet: the real story. *JFQ: Joint Force Quarterly*, *45*, 100–103.

Lietsala, K., & Sirkkunen, E. 2008. Social media. In *Introduction to the tools and processes of participatory economy* Accessed 12 Mar 2015.Available at: http://tampub.uta.fi/bitstream/handle/10024/65560/978-951-44-7320-3.pdf?sequence=1firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2138/1945

Lucas, S. 2014. *Syria Interview: Islamic's State of Iraq's Abu Summayah al Britani on Conflict and Caliphate.* Accessed 22 Dec 2014.Available at: http://eaworldview.com/2014/06/syria-interview-islamic-state-of-iraq-abu-sumayyah-al-britani-conflict-caliphate/

McKenna, K. Y. A., & Bargh, J. A. 1998. Coming out in the age of the internet: identity "demarginalization" through virtual group participation. *Journal of Personality and Social Psychology*, *75*(3), 681–694.

Meyrowitz, J. 1985. *No sense of place: The Impact of Electronic Media on Social Behavior, new* (Ed ed.,). OUP:USA.

Mosquewatch.blogspot.com. 2007. Paltalk hosts Al-Qaeda, Hizballah, and Hamas chat rooms. http://mosquewatch.blogspot.com/2007/12/exclusive-paltalk-hosts-al-qaeda.html. Accessed 15 June 2014.

Pennebaker, J., & King, L. 1999. Linguistic styles: language use as an individual difference. *Journal of Personality and Social Psychology*, *77*(6), 1296–1312.

Powell, B., Carsen, J., Crumley, B., Walt, V., Gibson, H., & Gerlin, A. 2005. Generation Jihad. *Time*, *166*, 56–59.

Times, N. D. 2014. *IS Supporters in France: The Jihadis Next Door?* Accessed 22 Dec 2014.Available at: http://www.newdelhitimes.com/isis-supporters-in-france-the-jihadis-next-door123/

Richards, D. 2014. *The twitter Jihad: Isis insurgents in Iraq*. ABC News: Syria using social media to recruit fighters promote violence Available at: http://www.abc.net.au/news/2014-06-20/isis-using-social-media-to-recruit-fighters-promote-violence/5540474 Accessed 10 Dec 2014.

Sageman, M. 2008. *Leaderless Jihad*. Philadelphia:University of Pennsylvania Press.

Sekulow, J., Sekulow, J., Ash, R., & French, D. 2014. *Rise of Isis: a threat we can't ignore*. Howard Publishing.

Selfhout, M., Burk, S., Branje, J., Denissen, M., & Meeus, W. 2010. Emerging late adolescent friendship networks and big five personality traits: a social network approach. *Journal of personality*, *78*(2), 509–538.

Schmid, A. 2005. Terrorism as psychological warfare. *Democracy and Security*, *1*(2), 138.

YouTube Statistics 2014. *Viewership.* Accessed 20 Dec 2014.Available https://www.youtube.com/yt/press/en-GB/statistics.html

Tsfati, Y., & Weimann, G. 2002. www.Terrorism.Com: terror on the internet. Studies in Conflict & Terrorism, 25(5), 317–332.

Verton, D. 2003. *Black ice: the invisible threat of cyber-terrorism*. New York:McGrawHill Osborne.

Twitter 2014. *Usage Statistics.* Available at: http://www.internetlivestats.com/twitter-statistics/.

Weimann, G. 2004. US Institute of peace December. *Special Report*, *119* Accessed 5 Aug 2014.Available at: http://www.usip.org/pubs/specialreports/sr119.html

Whitehead, T. 2014. 700 Britons fighting in Syria terror groups, warns Hollande. In *The telegraph* Accessed 22 Dec 2014.Available at: http://www.telegraph.co.uk/news/worldnews/middleeast/syria/10611286/700-Britons-fighting-in-Syria-terror-groups-warns-Hollande.html

Whine, M. 1999. Cyberspace-a new medium for communication, command, and control by extremists. *Studies in Conflict & Terrorism*, *22*(3), 231–246.

Wintour, P. & Jones, S. 2013. Theresa May's measures to tackle radicalisation come under fire: The guardian. https://www.theguardian.com/uk/2013/may/27/theresa-may-woolwich-radicalisation

Zimbardo, P. G. 1969. The human choice: Individuation, reason, and order vs. deindividuation, impulse, and chaos. In W. J. Arnold & D. Levine (Eds.), Nebraska symposium on motivation (vol. 17, pp. 237–307). Lincoln: University of Nebraska Press.

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