

This is a repository copy of *The Topic of Terrorism on Yahoo! Answers: Questions, Answers and Users' Anonymity*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/154122/>

Version: Accepted Version

Article:

Chua, Alton Y.K. and Banerjee, Snehasish orcid.org/0000-0001-6355-0470 (2020) The Topic of Terrorism on Yahoo! Answers: Questions, Answers and Users' Anonymity. *Aslib Journal of Information Management*. pp. 1-16. ISSN 2050-3806

<https://doi.org/10.1108/AJIM-08-2019-0204>

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



The Topic of Terrorism on Yahoo! Answers: Questions, Answers and Users' Anonymity

Journal:	<i>Aslib Journal of Information Management</i>
Manuscript ID	AJIM-08-2019-0204.R1
Manuscript Type:	Research Paper
Keywords:	Community question answering, online anonymity, online hate speech, Terrorism, Question themes, Answer characteristics

SCHOLARONE™
Manuscripts

The Topic of Terrorism on Yahoo! Answers: Questions, Answers and Users' Anonymity

Abstract

Purpose: This paper explores the use of community question answering sites (CQAs) on the topic of terrorism. Three research questions are investigated: What are the dominant themes reflected in terrorism-related questions? How do answer characteristics vary with question themes? How does users' anonymity relate to question themes and answer characteristics?

Design/Methodology/Approach: Data include 300 questions that attracted 2,194 answers on the CQA Yahoo! Answers. Content analysis was employed.

Findings: The questions reflected the community's information needs ranging from the life of extremists to counter-terrorism policies. Answers were laden with negative emotions, reflecting hate speech and Islamophobia, and making claims that were rarely verifiable. Users who posted sensitive content generally remained anonymous.

Practical Implications: This paper raises awareness of how CQAs are used to exchange information about sensitive topics such as terrorism. It calls for governments and law enforcement agencies to collaborate with major social media companies to develop a process for cross-platform blacklisting of users and content, as well as identifying those who are vulnerable.

Originality/Value: Theoretically, the paper contributes to the academic discourse on terrorism in CQAs by exploring the type of questions asked, and the sort of answers they attract. Methodologically, it enriches the literature around terrorism and social media that has hitherto mostly drawn data from Facebook and Twitter.

Keywords: Community question answering; online anonymity; online hate speech; terrorism; question themes; answer characteristics, information behaviour, social media

1. Introduction

1.1. Background

The threat of terrorism has become disturbingly unpredictable. The territorial demise of Islamic extremists in Iraq and Syria—referred to as the Islamic State of Iraq and Syria (ISIS) (Dearden, 2014)—was supposed to herald an era of peace. Instead, militants who fled from the collapsed caliphate have returned home or emerged elsewhere only to launch more attacks. For example, ISIS fighters flushed out of the Middle East carried out suicide attacks in Surabaya (Suzuki, 2018) and Sri Lanka (Bond and Findlay, 2019). Clearly, terrorism remains a persistent challenge worldwide.

While portrayed as a threat to society and human civilization by mainstream media, terrorists sell terrorism as freedom fighting via social networking sites and private messaging platforms (Johnson et al., 2016; Klausen, 2015). However, the actual workings of terrorism are largely shrouded in secrecy. For the curious, a convenient avenue to turn to is the community question answering sites (CQAs).

CQAs are social media platforms where users ask questions, answer those submitted by others, and have the option to evaluate responses using UpVotes and DownVotes (Agichtein et al., 2008; Roy et al., 2018). They serve as a continually-growing repository of topic-specific information. Over the years, scholars have studied a variety of topics on CQAs that run the gamut from civic education (Keynan and Lazar, 2017) and eating habits (Bowler et al., 2012) to non-suicidal self-injury (Lewis et al., 2012).

However, the topic of terrorism on CQAs has yet to receive scholarly attention. This research gap is important to address for two reasons. First, terrorism has entered the main line of discourse in CQAs. A search conducted by one of the authors on the keyword “terrorism” in the archives of Yahoo! Answers returned 10,126 results in October 2019. Some users

1
2
3 inquired about the genesis of terrorist groups (e.g., “Who exactly created ISIS?”) while others
4
5 were keen to understand terrorists’ underlying motives (e.g., “Why are terrorist’s [sic] trying
6
7 to hurt the beautiful Paris, France?”).
8
9

10 Second, in response to the call to study terrorism in the context of information
11
12 technology use (Hua and Bapna, 2012; Hua et al., 2018), some works have examined how
13
14 terrorists exploit social media platforms such as Facebook (McKeown, 2017) and Twitter
15
16 (Klausen, 2015). However, the heightened interest in terrorism on CQAs notwithstanding,
17
18 terrorism-related CQA content has yet to be systematically explored.
19
20
21
22
23

24 *1.2. Objective and Research Questions*

25
26 The objective of this paper is to investigate the topic of terrorism on CQAs, and in
27
28 particular, Yahoo! Answers. Specifically, the following three research questions (RQs) will
29
30 guide the investigation.
31
32

33 *RQ 1: What are the dominant themes reflected in terrorism-related questions?* The
34
35 intent is to uncover salient terrorism-related information needs of the online community.
36
37 Using inductive content analysis (Keynan and Lazar, 2017; Miles et al., 2013), the dominant
38
39 themes of the questions will be identified. While some questions are anticipated to be fairly
40
41 innocuous, others could be sensitive or even abusive, opening the door for impassioned
42
43 answers presented single-sidedly (Jane, 2014; March and Marrington, 2019).
44
45
46

47 *RQ 2: How do answer characteristics vary with question themes?* This RQ focuses on
48
49 the characteristics of answers attracted by each question theme identified in RQ 1.
50
51 Specifically, answers will be analysed in terms of four dimensions: directness, emotiveness,
52
53 verifiability and community approval. Directness assesses whether answers accurately
54
55 respond to-the-point (Fichman, 2011). Emotiveness indicates the use of affect-laden tone
56
57 (Chua and Banerjee, 2013) that can stoke emotions to foster extreme attitudes and beliefs.
58
59
60

1
2
3 Verifiability refers to the provision of references as a way to support the arguments
4
5 (Fichman, 2011). Community approval is measured using UpVotes and DownVotes cast by
6
7 CQA users (Agichtein et al., 2008).
8
9

10 *RQ 3: How does users' anonymity relate to question themes and answer*
11 *characteristics?* Known as the online disinhibition effect, users tend to loosen social
12
13 restrictions and vent out suppressed thoughts when they can be anonymous (Suler, 2004).
14
15 This explains why controversial and sensitive online messages are often submitted
16
17 anonymously (Mondal et al., 2017). For a topic such as terrorism, it would be insightful to
18
19 uncover patterns of users' anonymity across different question themes and answer
20
21 characteristics.
22
23
24
25

26 The paper is significant on three fronts. Theoretically, it initiates a new line of
27
28 academic discourse focusing on the topic of terrorism in CQAs by exploring the type of
29
30 questions asked, and the sort of answers they attract. Shedding light on the degree to which
31
32 users conceal their identity when discussing terrorism, the paper expands the scholarly
33
34 understanding of disinhibition by identifying two shades of online anonymity, namely, pure
35
36 anonymity and quasi-anonymity.
37
38
39

40 Methodologically, using data from Yahoo! Answers, the paper enriches the literature
41
42 around terrorism and social media that has mostly drawn data from Facebook (McKeown,
43
44 2017) and Twitter (Klausen, 2015). This is significant because findings from Facebook and
45
46 Twitter, which require users to be socially connected, cannot be generalized to CQAs that
47
48 support interactions even among strangers.
49
50

51 On the practical front, this paper raises awareness of how CQAs are used by the
52
53 online community to exchange information on terrorism. It urges counter-terrorism agencies
54
55 to collaborate with CQA service providers and other social media companies to identify and
56
57 track down users whose postings include a flavour of radicalization.
58
59
60

2. Literature Review

2.1. *Terrorism and Social Media*

The upsurge of terrorism starting from the 9/11 and the rise of social media can both be viewed as black swans (Taleb, 2007). Black swans are phenomena that cause massive impact but are difficult to forecast. Despite being outliers, these low-probability events potentially change the course of human history (LaFree, 2017; Taleb, 2007). The 9/11 attack was indeed unprecedented. As al-Qaeda operatives hijacked four commercial planes and flew into some of America's most iconic buildings, the crumbling of the World Trade Center's twin towers became a chilling image. Meanwhile, the Internet era witnessed a series of social media innovations such as Facebook, Twitter and Yahoo! Answers, which have been embraced by the public rapidly.

If understanding the black swan event of terrorism alone is challenging, grasping its confluence with the other black swan of social media is even trickier. Nevertheless, it is easy to see why these two black swans intersect. The key objectives of terrorists are radicalization, propaganda and recruitment (Weimann, 2012), all of which could be supported efficaciously through social media. For one, social media applications are freely accessible. Moreover, just as marketers rely on users' online behaviour to find potential customers, terrorist groups can trawl the Internet to fish for new recruits (Steinbach, 2016). Tellingly, a study of convicted UK-based terrorists revealed their extensive use of the online space to proselytize (Gill et al., 2017). Social media applications thus allow extremists to virtually knock on the doors of their target audiences (Johnson et al., 2016; Klausen, 2015; LaFree, 2017).

Research into the role of social media in terrorism has started to gain traction in recent years. A dominant stream of works examines how extremist content has crept into social media. The literature documents the use of Jihadi forum Shumukh al-Islam to facilitate lone-

wolf attacks (Weimann, 2012). It also highlights the emerging idea of ‘jihadi cool’, where pro-Islamic content is presented online as hip and trendy (Huey, 2015). Tweets posted by Western-origin extremists based in Syria were found to contain religious instructions, anecdotes from battles, and propagandizing pictures (Klausen, 2015).

Another research stream focuses on the online chatter in the aftermath of terrorist attacks. These events tend to trigger Islamophobia—the fear or hatred of Islam and Muslims, which in turn translate to online hate speech (Kaakinen et al., 2018). They can also result in online expressions of sympathy toward terrorists that in turn, can stir the hearts of potential recruits (Awan, 2016). These possibilities notwithstanding, how CQAs are used for the topic of terrorism remains largely unexplored hitherto.

2.2. Related Works on CQAs

The CQA literature can be divided into two broad areas of interest, namely, content and users. Content encompasses questions and answers while users include contributors, answerers and lurkers.

Among research that focuses on questions, a common approach is to develop taxonomies of the posted entries. For example, one classification scheme organizes questions as fact-seeking, advice-seeking, experience-seeking, prescription-seeking and solicitation of approval (Harper et al., 2010). Another categorizes questions as factoid, list, definition, complex interactive and target (Chua and Banerjee, 2013). In a related vein, some works have tried to cluster similar questions (Bloomer et al., 2016).

However, applying extant question-classification schemes on terrorism-related questions would still obscure the nature of users’ information needs. Instead, a theme-based analysis is preferred because it enables the actual topics of concern to be presented explicitly.

1
2
3 This also fills the gap in the literature, which is currently silent over the range of terrorism-
4 related issues discussed on social media, and specifically CQAs.
5
6

7
8 Another major strand of CQA research deals with answer characteristics. To
9
10 determine high-quality answers, some works relied on proxies such as answer length, and
11
12 answerers' reputation (Jeon et al., 2006). Others advocated the use of content analysis to
13
14 evaluate answer quality (Agichtein et al., 2008). For example, some focused on answer
15
16 characteristics such as accuracy and verifiability (Fichman, 2011), while others also took the
17
18 emotional value of answers into consideration (Chua and Banerjee, 2013).
19
20

21
22 This paper examines answers in terms of their directness, emotiveness, verifiability
23
24 and community approval. Collectively, these dimensions not only capture the essential
25
26 aspects of answers to terrorism-related questions but offer a peek into the community's
27
28 opinions on the entries. Specifically, directness assesses whether answers accurately respond
29
30 to-the-point (Fichman, 2011). Emotiveness is a measure of whether answers are affect-laden
31
32 (Chua and Banerjee, 2013), which can potentially stoke emotions to foster extreme attitudes
33
34 and beliefs. Verifiability refers to the provision of references in the answers (Fichman, 2011),
35
36 allowing for an expedient way to confirm the arguments. Community approval measures the
37
38 degree to which CQA users endorse and renounce answers using UpVotes and DownVotes,
39
40 respectively (Agichtein et al., 2008).
41
42
43

44
45 Much research has also delved into why users are drawn to CQAs. Some use CQAs to
46
47 establish a good reputation in the online community or to exhibit their altruism. Others
48
49 simply enjoy exchanging opinions on topics of their interests (Lu and Hsiao, 2007; Oh,
50
51 2011). More recently, Roy et al. (2018) found that while some users serve as gatekeepers who
52
53 strive to maintain the quality of the content on CQAs, others seldom regard themselves
54
55 morally responsible to the platform.
56
57
58
59
60

1
2
3 CQA research has also started to shed light on other user types. Works such as Slag et
4 al. (2015) identified users who are referred to as one-day flies in CQAs. These users join the
5 community, submit a post, and never emerge again. More commonly found in online
6 communities are lurkers who benefit from others' goodwill, but themselves do not contribute
7 anything (Amichai-Hamburger et al., 2016; Preece and Shneiderman, 2009).
8
9

10
11
12 Despite these works, the literature remains silent on whether anonymous users
13 necessarily post inferior content on CQAs. Nonetheless, the literature on online hate speech
14 could be brought to bear in the present context. Users who post abusive messages on social
15 media tend to conceal their identity. After all, the armour of anonymity encourages
16 disinhibition complex, the tendency to loosen social restrictions and vent out suppressed
17 thoughts (Mondal et al., 2017; Suler, 2004).
18
19

20
21
22 For a topic such as terrorism, users who submit innocuous content apparently have
23 nothing to hide but those who spew hate speech or contribute sensitive content may find
24 safety in being anonymous. Therefore, it is interesting to identify the relation between users'
25 anonymity and the nature of terrorism-related content on CQAs.
26
27

28 29 30 31 32 33 34 35 36 37 38 39 40 **3. Methods**

41 42 43 *3.1. Data Collection*

44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
Yahoo! Answers was selected as the data source. For one, it is one of the most widely
used CQAs, whose archives are searchable to anybody with Internet access (Keynan and
Lazar, 2017). Terrorism-related content available on such a popular platform deserves
scholarly attention. Furthermore, Yahoo! Answers does not require users to identify
themselves. The option to remain anonymous removes the psychological barrier of posting
anything—including potentially sensitive entries (Keynan and Lazar, 2017). This allows
terrorism-related content to be studied in terms of user anonymity.

1
2
3 A Python program was developed using Scrapy, an open-source framework, to crawl
4 data from Yahoo! Answers. The program collected terrorism-related data posted on the CQA
5
6 over a five-month period from October 2016 to February 2017, during which three major
7
8 terrorist attacks took place, namely, the suicide truck bombing in Mogadishu, Somalia, the al-
9
10 Rawda mosque attack in Bir al-Abed, Egypt, and the ambulance bombing in Kabul,
11
12 Afghanistan. This period also saw the 2016 US Presidential Election in which terrorism
13
14 emerged as one of the top voting issues.
15
16
17
18

19 The program specifically looked for questions containing at least one of the following
20
21 terms: 'terrorism,' 'terrorist,' 'al-Qaeda,' 'Islamic State,' 'ISIS,' 'ISIL' and 'Daesh.' While
22
23 the reason to include the first two terms is self-explanatory, the names of al-Qaeda and the
24
25 polyonymous ISIS were also chosen because these two extremist groups constituted the chief
26
27 threats of terrorism at the time of data collection (Clarke and Papadopoulos, 2016). The two
28
29 have become underground terror networks supported by several lone-wolves and sleeper cells
30
31 which are yet to be gunned down (Gunaratna et al., 2018).
32
33
34

35 The crawler retrieved 1,981 questions. Of these, 752 were unanswered and hence
36
37 eliminated. From the remaining pool of 1,229 questions, 300 entries from 129 users with
38
39 unique names and another 124 anonymously posted were randomly selected and admitted for
40
41 analysis. These questions represent an even distribution over the five-month period (60
42
43 questions per month x 5 months). They attracted 2,194 answers altogether contributed by
44
45 1,415 users with unique names and another 342 anonymous users. Overall, the size of the
46
47 dataset compares favourably with previous works that manually annotated CQA data (e.g.,
48
49 Harper et al., 2010; Lewis et al., 2012).
50
51
52
53

54 55 56 *3.2. Coding and Analysis* 57 58 59 60

1
2
3 As this paper explores how CQA users engage with the topic of terrorism—a
4 phenomenon that has received little scholarly attention—and asks relatively exploratory
5 research questions, a qualitative methodology was best suited for coding and analysis (Li et
6 al., 2018; Miles et al., 2013; Silverman, 2013; Strauss and Corbin, 1998). Specifically, an
7 inductive approach was required to code the question themes because a set of a priori codes
8 could not be developed from the limited literature (King, 2004). The inductive approach
9 facilitated an appreciation of the wholeness of the question dataset while capturing
10 inconsistencies (Holloway and Wheeler, 2010). Answer characteristics, on the other hand,
11 could be coded deductively.
12
13
14
15
16
17
18
19
20
21
22
23

24 Three coders, who were graduate students in a large public university in Asia, were
25 recruited. They jointly read each question a few times to establish emergent codes.
26 Thereafter, the authors and the coders conferred to identify relations among the initial codes.
27 Constant comparison was employed (Miles et al., 2013; Strauss and Corbin, 1998). Given the
28 need for parsimony, similar emergent codes were merged. After a few iterations of checking
29 between the data and the emergent codes, the following three code labels were developed:
30 terrorist-centric questions, consequence-centric questions, and action-centric questions.
31
32
33
34
35
36
37
38
39

40 Questions were coded as (1) terrorist-centric if they dealt with terrorists' identity,
41 actions, practices and beliefs; (2) consequence-centric if they encompassed concerns or
42 queries about the effects of terrorism; and (3) action-centric if they focused on tackling the
43 threat of terrorism. The robustness of the coding scheme was confirmed by checking that
44 each question could be coded into one or more themes.
45
46
47
48
49

50 Besides, regardless of theme, each question could also be coded as either innocuous
51 or sensitive. Questions were deemed innocuous if they were politically correct, maintained a
52 civil tone, or sought to promote peace without seeking contentious responses. They stayed
53 away from social fault lines such as nationality and religion (e.g., "Does terrorism lead to
54
55
56
57
58
59
60

1
2
3 adolescent depression?”). In contrast, questions were labelled as sensitive if they had a
4
5 radicalization flavour, or could trigger discrimination and/or malevolence (e.g., “What is the
6
7 best way to slaughter a Muslim terrorist?”). Where possible, an effort was made to identify
8
9 sub-themes within each theme-innocuity combination of questions.
10
11

12 The answers were coded deductively by the three coders in terms of directness,
13
14 emotiveness and verifiability (Fichman, 2011), while the volumes of UpVotes and
15
16 DownVotes were readily available from the dataset. Specifically, an answer was coded as
17
18 direct if it responded to each part of the question to the point (1), digressive otherwise (0).
19
20 The answer was coded as positively emotive if it expressed positive emotions such as
21
22 gratitude (+1), negatively emotive if it conveyed negative emotions such as anger (-1), non-
23
24 emotive otherwise (0). The answer was coded as verifiable if it provided active URLs to other
25
26 sources in support of its content (1), non-verifiable otherwise (0).
27
28
29

30 To establish inter-coder reliability, all the three coders jointly coded 177 answers to a
31
32 randomly selected pool of 25 questions (11 innocuous + 14 sensitive). The mean pair-wise
33
34 inter-coder reliability in terms of Cohen’s Kappa for directness, emotiveness and verifiability
35
36 were 0.92, 0.87 and 0.93 respectively—confirming agreement among the coders beyond
37
38 chance. Disagreements were resolved through discussion. The remaining 2,017 answers were
39
40 coded by distributing them roughly equally among the three coders.
41
42
43

44 The profile of both askers and answerers was traced in terms of anonymity. As
45
46 indicated earlier, Yahoo! Answers allows its users to submit content without identifying
47
48 themselves to the community (Keynan and Lazar, 2017). Anonymity was operationalized
49
50 based on whether a given user had chosen not to use a username, and had concealed his or
51
52 her profile details.
53
54
55

56 57 58 **4. Results** 59 60

4.1. Question Themes (RQ 1)

As shown in Table 1, the 300 questions in the dataset (125 innocuous + 175 sensitive) could be grouped thematically as terrorist-centric (17.67%), consequence-centric (51.67%), and action-centric (41.33%). The percentages add to more than 100% because one question could be coded into multiple themes. For all the three themes, sensitive questions outnumbered innocuous ones. Furthermore, none of the questions referred to the three terrorist attacks that occurred during the data collection period. Perhaps overshadowed by the 2016 US Presidential Election which enjoyed extensive and sustained news coverage, these attacks remained under the radar of the Yahoo! Answers user community.

[Insert Table 1 here]

4.1.1. Solely Terrorist-Centric Questions

Solely terrorist-centric questions deal with terrorists' identity, actions, practices and beliefs. Among the innocuous ones are those mostly seeking terrorism-related facts. Examples include "Who exactly created ISIS?" and "Has the Pentagon ever been attacked by terrorists?" A few questions such as "Is ISIS planning a 911-type attack on USA...?" inquired about terrorists' possible course of action.

The sensitive questions reflected two sub-themes. One shows interest in the clandestine life of extremists. Examples include "How come terrorists scream 'Allah Akbar'...before they behead someone or blow up?" This may come across as offensive because the expression 'Allah Akbar' is a declaration of faith used in Muslim prayer. There was also much interest in how terrorists treated women. This is exemplified through questions such as "ISIS has used many women as sex slaves. Is it lawful in Islam?"

The other sub-theme reflects the potential to foster extreme attitudes and stoke emotions. Questions such as "Does Austria want to be part of the new Islamic caliphate?"

1
2
3 appeared to be blatantly fishing for new recruits from a specific country. Divisive questions
4
5 include the likes of “Why do white people think all Muslims are terrorists?”
6
7
8
9

10 4.1.2. Solely Consequence-Centric Questions

11
12 Solely consequence-centric questions have to do with the effects of terrorism. The
13
14 innocuous ones reflected three sub-themes. The first deals with the impact on global travel.
15
16 An example of such questions is “What country ... [is safe from terrorism] to go to a
17
18 holiday?”
19
20

21
22 The second sub-theme involves psychological impact. For example, one was a
23
24 personal identity and existential question, “Will you see me as a terrorist because I am a
25
26 Muslim?” Another mused, “I only see things getting worse for Muslims...Thinking about
27
28 wearing a cross. Should I change my name?”
29

30
31 The third sub-theme comprises enquiries on the societal impact of terrorism. This is
32
33 evident from questions such as “Does terrorism lead to adolescent depression?”
34

35
36 The sensitive ones carry themes that mix terrorism with broader social issues such as
37
38 religion and sexual orientation. This is evident from questions such as “...beside(s) being a
39
40 terrorist...what have your filthy Islamic followers contributed to the society and science in
41
42 recent times?” and “Is gay marriage more evil than ISIS?” These questions trigger ill-feelings
43
44 across religious and social fault-lines that can potentially lead to violence.
45
46
47
48

49 4.1.3. Solely Action-Centric Questions

50
51 Solely action-centric questions focus on interventions to tackle terrorism. Users
52
53 looked for solutions in governments. Incidentally, counter-terrorism featured among the most
54
55 important voting issues in the 2016 US presidential election, which fell within the data
56
57
58
59
60

1
2
3 collection window of this paper. The innocuous questions had a benign tone. An example is
4
5 “Should the U.S and Russia fight together to destroy ISIS?”
6
7

8 In contrast, the sensitive questions stoked violent attitudes in dealing with terrorists.
9
10 This can be seen from questions such as “What is the best way to slaughter a Muslim
11
12 terrorist?” and “Do you hope Trump brings back torture [as punishment for terrorists]?”
13
14

15 Additionally, there were references to President Trump’s policy in January 2017 to
16
17 impose a temporary ban on several Muslim-majority countries from travelling to the US
18
19 (BBC, 2017). This can be seen from questions such as “Do you ag(r)ee with Donald Trump
20
21 that we should ban Muslims coming from countries seized by ISIS, Al Qaeda and other
22
23 terrorists?” and “Since Saudi Arabia is a known funder of terrorism, why doesn't Trump's
24
25 new ban extend to them?”
26
27
28
29
30

31 4.1.4. Questions Reflecting Multiple Themes

32
33 One question could be coded into multiple themes. Innocuous questions that were
34
35 both terrorist- and consequence-centric include “Will ISIS and bad Muslims invade us all and
36
37 cause WW3?” and “Why are terrorist’s [sic] trying to hurt the beautiful Paris, France?”
38
39 Examples of sensitive questions belonging to these two themes are “Muslim terrorists believe
40
41 they are doing good? Does religion warp a person's sense of morality so badly that they think
42
43 doing indescribable evil is actually doing good?” and “Most of the terrorists attack are from
44
45 Muslim men. Why do they bomb buildings, molest little boys and girls..., and treat women
46
47 like worse than a pile of garbage?” While seeking to know more about terrorists’ actions and
48
49 beliefs, these questions also show a palpable sense of anxiety.
50
51
52
53

54 A few questions focused on both consequences of and actions against terrorism.
55
56 Innocuous questions often invoked the divine as seen in “What would you do if you were a
57
58 God [to fight terrorism]?...” and “...Should the U.S. stay out of it [terrorism]... and let Allah
59
60

1
2
3 sort it out? ” The sensitive questions reflected ill-feelings: “Why is it that after everything
4 horrible ISIS does to our citizens why are there idiots who believe we shouldn't do anything
5 to them?” and “What would you have done differently than the victims on September 11 if
6 you were on the plane that crashed...? If I was on the plane, I would have killed all the
7 terrorist myself....”

8
9
10
11
12
13
14
15 Only two questions were coded as both terrorist- and action-centric. They were
16 sensitive and expressed the supposed injustice that terrorists suffer. One asked, “I just watch
17 the news & they showed a security guard shooting down a Russian ambassador. Now I feel
18 sensitized and shocked...is that a demonstration video of how police take down terrorist?”
19 The other inquired, “Why can't conservatives seem to grasp the concept of ‘innocent until
20 proven guilty’ when it comes to Muslims? they lock up suspected terrorists at gitmo without
21 trial, what if some of them are innocent?????”

22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Only one double-barrelled question, which was innocuous, reflected all the three themes. It is as follows: “...problem = terrorism, crime, shootings? How did [terrorists] become so radicalized? What do we do with them?” It asked about terrorists’ beliefs (terrorist-centric), highlighted problems such as “crime” and “shootings” that the society has been facing (consequence-centric), and called for ways to deal with terrorism (action-centric).

4.2. Answer Characteristics across Question Themes (RQ 2)

The 300 questions in the dataset cumulatively attracted 2,194 answers. Of these, 1,287 were in response to sensitive questions whereas the remaining 907 were in response to innocuous ones. The average number of answers per question was 7.31 (min=1, max=53). The question “Why do white people think all Muslims are terrorists?” garnered 53 responses, the highest among all the questions. Table 2 summarizes the characteristics of answers in the dataset.

1
2
3 Five patterns stand out. First, answers were generally straight-to-the-point regardless
4 of the question's theme and innocuity. In other words, answerers responded as required and
5 did not veer off-topic. To delve deeper, given that the variables were categorical in nature,
6 non-parametric cross-tabulation analysis was conducted. Directness of answers did not vary
7 significantly with either the themes or the innocuity of questions. Direct answers were
8 aplenty. For example, the question "Does Austria Want to be part of the New Islamic
9 Caliphate?" received to-the-point responses such as "People with working brains definitely
10 do not..." Questions such as "What should be done to people who say bad things about
11 Islam?" attracted both harmless and provocative responses, which were to-the-point. A
12 harmless answer includes "Nothing. There should be no consequences for saying anything
13 bad about anything." In contrast, a provocative answer shouted, "KILL THE INFIDELS!"

14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Second, answers were generally non-emotive regardless of the question themes. Nonetheless, among the emotive ones, answers were laden more with negative than positive emotions. A significant difference arose with respect to question innocuity, $\chi^2(2, N=2194)=16.13$, Cramer's $V=0.09$, $p<0.001$. Specifically, among the 1,287 responses to sensitive questions, the proportions are as follows: 942 non-emotive (73.19%), 314 negatively emotive (24.40%), and 31 positively emotive (2.41%). Similarly, among the 907 entries answering innocuous questions, 731 were non-emotive (80.60%), 161 negatively emotive (17.75%), and only 15 positively emotive (1.65%).

Third, negative emotions were quite prominent in answers to sensitive action-centric questions (25.67%, cf. Table 2). Of particular note is the question "What is the best way to slaughter a Muslim terrorist?" that garnered answers reflecting hate speech and Islamophobic sentiments: "It's not worth wasting much time on such scum," and "Fire at him from an AK-47, cremate corpse and flash the ashes down the toilet,"

1
2
3 In contrast, positive emotions were forthcoming in response to innocuous
4
5 consequence-centric questions (2.98%, cf. Table 2). This was particularly true for questions
6
7 that highlighted the psychological impact of terrorism on individuals. For example, the
8
9 question “[With so much terrorism around]...I wish I was NEVER born. If you had the
10
11 option, would you choose nonexistence?” attracted compassionate answers: “No... Life is
12
13 full of highs and lows, that's just how it is and we need to make the best of it.” Another
14
15 positively emotive answer to the question almost offered a spiritual lesson: “I have attempted
16
17 suicide 4 times... But 12 yrs ago when I turned to God things got better each year.”
18
19

20
21
22 Fourth, the verifiability of answers was abysmally low. Like directness, verifiability
23
24 of answers varied significantly with neither questions’ themes nor innocuity. A question that
25
26 received an answer with an active URL asked, “What do you think of how ISIS and Taliban
27
28 treat women?” The response lashed out, “I watched...[URL to a video on Liveleak, a video-
29
30 sharing website] a gang of screaming Afghani men stone a girl to death...The way women
31
32 are treated in Muslim countries is disgusting.”
33
34

35
36 Finally, all else being equal, answers garnered more UpVotes (1.15 ± 1.51 , Min=0,
37
38 Max=10) than DownVotes (0.82 ± 1.29 , Min=0, Max=11). Interestingly, responses to sensitive
39
40 questions (UpVotes: 1.22 ± 1.59 ; DownVotes: 0.88 ± 1.29) attracted significantly more
41
42 UpVotes as well as DownVotes compared with those answering innocuous queries (UpVotes:
43
44 1.06 ± 1.37 ; DownVotes: 0.75 ± 1.27); $t_{\text{UpVotes}}(2111.15) = -2.55$, $p_{\text{UpVotes}} = 0.01$; $t_{\text{DownVotes}}(2192) = -$
45
46 2.01 , $p_{\text{DownVotes}} = 0.04$. Put differently, the CQA community was more engaged with terrorism-
47
48 related questions if they were sensitive rather than innocuous.
49
50

51
52
53 **[Insert Table 2 here]**
54
55

56
57 Further exploratory analyses were conducted to ascertain any significant relations
58
59 between community approval and the other dimensions of answer characteristics. The only
60

1
2
3 statistically significant result was that negatively emotive answers received greater
4
5 community approval than neutral ones. A one-way analysis of variance of the three levels of
6
7 answer emotiveness yielded a significant result for UpVotes; $F_{\text{UpVotes}}(2,2191)=9.32$;
8
9 $p_{\text{UpVotes}} < 0.001$; $\eta_{\text{UpVotes}}^2 = 0.008$. Tukey's post-hoc test confirmed that the number of UpVotes
10
11 in answers reflecting negative emotions (1.37 ± 1.73) was significantly greater than those in
12
13 non-emotive answers (1.11 ± 1.44).
14
15
16
17
18

19 4.3. Users' Anonymity, Question Themes and Answer Characteristics (RQ 3)

20
21 Table 3 shows the level of anonymity in terrorism-related content posted on Yahoo!
22
23 Answers. Specifically, 124 out of 300 questions, and 342 out of 2,194 answers were
24
25 anonymous. Although asker anonymity did not differ significantly across the three question
26
27 themes, there was a significant difference between askers' anonymity and the innocuity of
28
29 questions ($\chi^2(1, N=300)=19.71$, Cramer's $V=0.26$, $p < 0.001$).
30
31
32

33 Only 33 of the 125 innocuous questions were posted anonymously (26.4%) while 91
34
35 of the 175 sensitive questions were anonymous (52%). In other words, sensitive questions
36
37 were more likely to be submitted anonymously than innocuous ones.
38
39

40 In terms of answerer anonymity, there was no significant difference between those
41
42 responding to sensitive questions and those to innocuous ones. Furthermore, there was no
43
44 significant difference between anonymous and non-anonymous answers in terms of any of
45
46 the answer characteristics—directness, emotiveness, verifiability and community approval.
47
48
49
50

51
52 **[Insert Table 3 here]**
53
54
55

56 Sensitive questions submitted from under the cloak of anonymity include the likes of
57
58 “Will ISIS and bad Muslims invade us all...?” and “Was Muhammad, the founder of Islam, a
59
60

1
2
3 terrorist?" The former received the following anonymously-posted answer: "Oh kid, forget
4 that term 'Muslims' ... all the major factors responsible [for terrorism] are the globalist elites,
5 doesn't has to be Muslims..." The latter received anonymously-posted Islamophobic answers
6 such as "Yes, he wanted infidels and gays to be killed."
7
8
9
10
11

12 Nonetheless, some sensitive questions were posted by users who provided their
13 profile details. For example, a non-anonymous question maintained an Islamophobic tone:
14 "Some radical Islamic terrorist stabbed people at Ohio state today but People want to get mad
15 at Trump for not letting them in?" It received several non-anonymous answers such as
16 "Provoke and when they hit back call them terrorist, thugs, rapist... What a game" and
17 "...these are indeed radical Islamic terrorists and not just some misunderstood anti-social
18 college student who went nuts." It seems that when askers who posted a sensitive question
19 were prepared to disclose their profile details, answerers responded likewise even if their
20 answers could potentially offend others.
21
22
23
24
25
26
27
28
29
30
31
32

33 Another example is the following non-anonymous question: "ISIS has used many
34 women as sex slaves. Is it lawful in Islam?" It received nine responses, of which six were
35 anonymous. While the non-anonymous ones were brief and to-the-point (e.g., "Yes," "Yes in
36 the quran"), the anonymous ones were willing to elaborate their viewpoints as in "the
37 (I)slamic faith in the extreme sense is very against women's rights," and "Yes in fact Allah's
38 apostle had many sex slaves. But after fulfilling their wishes and desires he set them free."
39
40
41
42
43
44
45
46
47
48
49
50
51

52 Besides, two serendipitous results arose. First, even for content posted on Yahoo!
53 Answers non-anonymously, the actual identity of these contributors remained veiled. They
54 chose names including those of celebrities, inanimate objects, and even those that appear to
55 have been created through random keystrokes. Clearly, these users wanted to be recognized
56
57
58
59
60

1
2
3 as distinct individuals in the community but were unwilling to take responsibility for the
4
5 content they created.
6
7

8 Second, users occasionally showed disdain to those who posted anonymously. In
9
10 particular, some answerers digressed to take a jab at the askers: “so many people afraid to
11
12 voice their opinions and hide behind anonymity” and “Funny how you just switched to
13
14 ‘anonymous’...Grow up.” Another answer advised, “If you're so unsure of what you say, or
15
16 so cowardly that you have to post your opinion anonymously, then maybe you should
17
18 reconsider speaking.”
19
20
21
22
23

24 **5. Discussion and Conclusions**

25
26 This paper explored the use of CQAs on the topic of terrorism. It investigated three
27
28 RQs that focused on questions (RQ 1), answers (RQ 2), and users’ anonymity (RQ 3). In
29
30 response to RQ 1, the paper found three types of questions: terrorist-centric, consequence-
31
32 centric, and action-centric. On RQ 2, answers were found to be laden with negative emotions
33
34 reflecting hate speech and Islamophobia, making claims that were rarely verifiable. Finally,
35
36 on RQ 3, the paper showed that users who posted sensitive content generally remained
37
38 anonymous.
39
40
41
42
43

44 *5.1. Key Findings*

45
46 Three key findings are worthy mentioning. First, proselytization is possible on CQAs
47
48 through both questions and answers. Questions such as “Does it bother liberals knowing that
49
50 35 ISIS terrorists were killed in an ambush in Syria today?” could stoke emotions and trigger
51
52 empathy for extremists. Moreover, even innocuous questions such as “Will ISIS and bad
53
54 Muslims invade us all...?” received anonymously-posted tendentious and digressive answers
55
56 such as, “Oh kid, forget that term ‘Muslims’ ... all the major factors responsible [for
57
58
59
60

1
2
3 terrorism] are the globalist elites, doesn't has to be Muslims...” Clearly, questions and
4
5 answers can be used to paint terrorists as victims of circumstances rather than aggressors. In
6
7 addition, terrorists may monitor CQA content to fish for new recruits. For example, they can
8
9 spot and radicalize seemingly vulnerable users (Johnson et al., 2016; LaFree, 2017;
10
11 Steinbach, 2016), who post content such as “I just watch the news & they showed a security
12
13 guard shooting down a Russian ambassador. Now I feel sensitized and shocked...is that a
14
15 demonstration video of how police take down terrorist?” While the literature has shown
16
17 social media to be a tool for cyber radicalization (Klausen, 2015; McKeown, 2017), this
18
19 paper is the first to find evidence—albeit not overly pervasive and expectedly so—that CQAs
20
21 can potentially promote Jihadist sentiments through subtle means.
22
23
24
25

26
27 Second, a culture of trolling exists on CQAs. The literature suggests three forms: one
28
29 form is meant for fun and is known as kudos trolling, the second is intended to insult and is
30
31 referred as flame trolling, and the third is characterized by extravagant nastiness and is called
32
33 e-bile (Jane, 2014; March and Marrington, 2019). While kudos trolling was limited, evidence
34
35 for flame trolling and e-bile was aplenty. Users rebuking others for posting anonymously—
36
37 for example, “Funny how you just switched to ‘anonymous’...Grow up”—is an example of
38
39 flame trolling. The invective in the Islamophobic answer “Feed them to hungry pigs” in
40
41 response to the question “What is the best way to slaughter a Muslim terrorist?” represents e-
42
43 bile (Jane, 2014). Overall, the topic of terrorism on CQAs seems to create a supercharged
44
45 emotional cyber-atmosphere that breeds hate speech. This explains why sensitive terrorism-
46
47 related questions attracted more responses than innocuous ones did, and that more UpVotes
48
49 were found among answers containing negative emotions that those which were positive or
50
51 neutral. Out of a warped sense of pride, CQA users are enthused to play to the gallery
52
53 through flame trolling and e-bile.
54
55
56
57
58
59
60

1
2
3 Third, CQA users mostly refrain from disclosing their real identities in posting
4
5 contentious content. Sensitive questions were significantly more likely to be submitted
6
7 anonymously than innocuous ones. While no significant difference arose with respect to
8
9 answers, the paper found that users' real identities were seldom recognizable. Using names
10
11 non-traceable to themselves, CQA users become embolden to use provocative, inflammatory
12
13 or uncivil language. Thus, the paper not only lends support to the notion of disinhibition
14
15 complex (Mondal et al., 2017; Suler, 2004) but also extends it by identifying two different
16
17 shades of online anonymity. One shade represents pure anonymity where no identifying
18
19 information is present; the second is quasi-anonymity, where users desire to be recognized as
20
21 distinct individuals but do not disclose identifying information. Both seem equally conducive
22
23 to disinhibition.
24
25
26
27
28
29
30

31 *5.2. Contributions*

32
33 The theoretical contribution of the paper is three-fold. First, it is the earliest work to
34
35 investigate the topic of terrorism on CQAs. The confluence of two black swan events has
36
37 raised the alarm bells on the use of social media tools for terrorism purposes (Steinbach,
38
39 2016). This paper dovetails the literature by analysing terrorism-related content on CQAs,
40
41 where users who are not socially connected are given the opportunity to interact.
42
43
44

45 Second, with the test case of Yahoo! Answers, the paper offers fresh insights into the
46
47 literature on terrorism and social media. By tracing the themes of questions submitted, it
48
49 uncovers the gamut of information needs of the online community ranging from the
50
51 clandestine life of extremists and Donald Trump's counter-terrorism policies to psychological
52
53 and societal impact. Among answers returned, the paper finds negative emotions more
54
55 prevalent than positive ones. In terms of users' anonymity, it shows how the disinhibition
56
57
58
59
60

1
2
3 complex allows unfettered latitude for netizens who conceal their identities to articulate their
4
5 questions and views on terrorism.
6

7
8 Third, the paper offers a new direction for CQA research. Previous studies have
9
10 identified some bizarre uses of CQAs. For example, Bowler et al. (2012) suggested that
11
12 Yahoo! Answers could be used by professional authors to solicit ideas on storylines. This
13
14 paper identifies yet another outrageous use: proselytization. Existing CQA research which
15
16 often focuses on predicting questions likely to be answered, and answers likely to receive
17
18 community endorsement could be expanded to include detection of sensitive content.
19
20 Questions and answers that contain extremist flavours must be identified and nipped in the
21
22 bud.
23
24

25
26 Public pressure has been mounting for social media giants such as Facebook and
27
28 Twitter to do their bit in curbing the spread of terrorist ideologies and extremist content. To
29
30 this end, different approaches, including the use of human moderators and machine learning
31
32 algorithms, have shown promising signs to block terrorist accounts and remove undesirable
33
34 content (Leetaru, 2018, Lomas, 2018). It seems that CQAs are left out of the picture even
35
36 though they could be exploited by terrorists for proselytization, as shown in the findings.
37
38 Hence, on the practical front, this paper suggests that governments and law enforcement
39
40 agencies collaborate with major social media companies to develop a process for cross-
41
42 platform blacklisting of users and content, as well as identifying those who are vulnerable.
43
44
45

46
47 Next, CQAs such as Yahoo! Answers too can play a part. Removing the anonymity
48
49 option, for example, ensures users do not shirk responsibility for the content they create.
50
51 Additionally, filters could be used to detect sensitive language when users proceed to submit
52
53 content. While kudos trolling and flame trolling may still be allowed to embody the
54
55 democratic ideals of free speech, the filters must minimally stop e-bile and detect entries that
56
57 promulgate political insurgency, breaches to national security, or acts of terror.
58
59
60

5.3. *Limitations and Future Work*

The findings from paper have to be viewed in light of three limitations. First, data were collected and analysed from a single platform. Captured as a snapshot in time, the scope for triangulation was limited. Second, even though several provocative questions and answers were found, it remains unclear whether those postings were contributed innocently or with nefarious agenda. After all, the authors had no access to content contributors. Third, anonymity was operationalized based on whether a given user had chosen not to use a username on Yahoo! Answers. This operationalization could not track users who use fictitious usernames, which are in any case impossible to differentiate from genuine usernames.

Interested scholars could extend the current work by drawing data from multiple platforms such as Answerbag and Quora, and over a longer timeframe, and use the enlarged dataset to detect content with a flavour of hate speech and radicalization. Social network analyses could also be carried out to identify groupings among users. Additionally, algorithms, including those that seek to predict potential answerers (Le and Shah, 2018) could be used to identify high-risk individuals with a proclivity for spreading terrorist ideology.

Another line of investigation involves contacting and interviewing named users who posted terrorism-related content on CQAs. The intent is to probe into their underlying motives, expectations and sentiments towards CQAs. Hopefully, with deeper insights, we can keep CQAs safe for users to ask questions and receive answers, just as these platforms were originally intended.

References

- Agichtein, E., Castillo, C., Donato, D., Gionis, A., and Mishne, G. (2008). "Finding high-quality content in social media" in *proceedings of the International Conference on Web Search and Data Mining 2008*. New York, NY: ACM, pp. 183-194.
- Amichai-Hamburger, Y., Gazit, T., Bar-Ilan, J., Perez, O., Aharony, N., Bronstein, J., and Dyne, T. S. (2016). "Psychological factors behind the lack of participation in online discussions", *Computers in Human Behavior*, Vol. 55, pp. 268-277.
- Awan, I. (2016). "Islamophobia on social media: A qualitative analysis of the Facebook's Walls of Hate", *International Journal of Cyber Criminology*, Vol. 10 No. 1, pp. 1-20.
- BBC. (2017). "Trump's executive order: Who does travel ban affect?" 10 February, available at <https://www.bbc.co.uk/news/world-us-canada-38781302> (accessed 16 April 2019).
- Blooma, M., Goh, D., Chua, A., and Wickramasinghe, N. (2016). "Graph-based cluster analysis to identify similar questions: A design science approach", *Journal of the Association for Information Systems*, Vol. 17 No. 9, pp. 590-613.
- Bond, D., and Findlay, S. (2019). Sri Lanka attacks spark fears of ISIS resurgence, *Financial Times*, 24 April, available at <https://www.ft.com/content/6981d396-661d-11e9-9adc-98bf1d35a056> (accessed 1 Jun 2019).
- Bowler, L., Oh, J., He, D., Mattern, E., and Jeng, W. (2012). "Eating disorder questions in Yahoo! Answers: Information, conversation, or reflection?" in *Proceedings of the Association for Information Science and Technology*, Vol. 49 No. 1, pp. 1-11.
- Chua, A., and Banerjee, S. (2013). "So fast so good: An analysis of answer quality and answer speed in community Question-answering sites", *Journal of the Association for Information Science and Technology*, Vol. 64 No. 10, pp. 2058-2068.

1
2
3 Clarke, R.A., and Papadopoulos, E. (2016). "Terrorism in perspective: A review for the next
4 American President", *The Annals of the American Academy of Political and Social*
5
6 *Science*, Vol. 668 No. 1, pp. 8-18.
7
8
9

10 Dearden, L. (2014). Isis vs Islamic State vs Isil vs Daesh: What do the different names mean
11 – and why does it matter? *Independent*, 23 September, Available at
12
13 [https://www.independent.co.uk/news/world/middle-east/isis-vs-islamic-state-vs-isil-](https://www.independent.co.uk/news/world/middle-east/isis-vs-islamic-state-vs-isil-vs-daesh-what-do-the-different-names-mean-9750629.html)
14
15 [vs-daesh-what-do-the-different-names-mean-9750629.html](https://www.independent.co.uk/news/world/middle-east/isis-vs-islamic-state-vs-isil-vs-daesh-what-do-the-different-names-mean-9750629.html) (accessed 14 April 2019).
16
17
18

19 Fichman, P. (2011). "A comparative assessment of answer quality on four question
20 answering sites", *Journal of Information Science*, Vol. 37 No. 5, pp. 476-486.
21
22
23

24 Gill, P., Corner, E., Conway, M., Thornton, A., Bloom, M., and Horgan, J. (2017). "Terrorist
25 use of the Internet by the numbers", *Criminology & Public Policy*, Vol. 16 No. 1, pp.
26
27 99-117.
28
29

30 Gunaratna, R., Bashar, I., Alkaff, S.H., Mahzam, R., and Soliev, N. (2018). "Global threat
31 assessment". Available at [https://www.rsis.edu.sg/rsis-publication/icpvtr/counter-](https://www.rsis.edu.sg/rsis-publication/icpvtr/counter-terrorist-trends-and-analyses-ctta-volume-10-issue-01)
32
33 [terrorist-trends-and-analyses-ctta-volume-10-issue-01](https://www.rsis.edu.sg/rsis-publication/icpvtr/counter-terrorist-trends-and-analyses-ctta-volume-10-issue-01) (accessed 14 April 2019).
34
35
36

37 Holloway, I., and Wheeler, S. (2010). *Qualitative research in nursing and healthcare*.
38
39 Oxford, UK: Blackwell.
40
41

42 Harper, F. M., Weinberg, J., Logie, J., and Konstan, J. A. (2010). "Question types in social
43 Q&A sites". *First Monday*, Vol. 15 No. 7, Available at
44
45 <http://ojphi.org/ojs/index.php/fm/article/view/2913/2571> (accessed 14 April 2019).
46
47
48

49 Hua, J., and Bapna, S. (2012). "How can we deter cyber terrorism?" *Information Security*
50
51 *Journal: A Global Perspective*, Vol. 21 No. 2, pp. 102-114.
52
53

54 Hua, J., Chen, Y., and Luo, X.R. (2018). "Are we ready for cyberterrorist attacks? Examining
55 the role of individual resilience", *Information & Management*, Vol. 55 No. 7, pp. 928-
56
57 938.
58
59
60

- 1
2
3 Huey, L. (2015). "This is not your mother's terrorism: Social media, online radicalization and
4 the practice of political jamming", *Journal of Terrorism Research*, Vol. 6 No. 2, pp.
5 1-16.
6
7
8
9
10 Jane, E.A. (2014). "'Your a ugly, whorish, slut' understanding e-bile". *Feminist Media*
11 *Studies*, Vol. 14 No. 4, pp. 531-546.
12
13
14 Jeon, J., Croft, W., Lee, J.H., & Park, S. (2006). "A framework to predict the quality of
15 answers with non-textual features", *Proceedings of the Annual International*
16 *Conference on Research and Development in Information Retrieval 2006*, New York,
17 NY: ACM. pp. 228-235.
18
19
20
21
22
23
24 Johnson, N.F., Zheng, M., Vorobyeva, Y., Gabriel, A., Qi, H., Velásquez, N., ... & Wuchty,
25 S. (2016). "New online ecology of adversarial aggregates: ISIS and beyond". *Science*,
26 Vol. 352 No. 6292, pp. 1459-1463.
27
28
29
30
31 Kaakinen, M., Oksanen, A., and Räsänen, P. (2018). "Did the risk of exposure to online hate
32 increase after the November 2015 Paris attacks? A group relations approach",
33 *Computers in Human Behavior*, Vol. 78 pp. 90-97.
34
35
36
37
38 Keynan, I., & Lazar, A. (2017). "Defining the good citizen: Online conceptions of American
39 members of the Yahoo! Answers community", *International Journal of Social*
40 *Science Studies*, Vol. 5 No. 4, pp. 6-13.
41
42
43
44
45 King, N. (2004). Using templates in the thematic analysis of text. In Cassell, C., Symon, G.
46 (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 256-
47 270). London, UK: Sage.
48
49
50
51 Klausen, J. (2015). "Tweeting the Jihad: Social media networks of Western foreign fighters
52 in Syria and Iraq", *Studies in Conflict & Terrorism*, Vol. 38 No. 1, pp. 1-22.
53
54
55
56 LaFree, G. (2017). "Terrorism and the Internet", *Criminology & Public Policy*, Vol. 16 No. 1,
57 pp. 93-98.
58
59
60

- 1
2
3 Le, L.T., and Shah, C. (2018). "Retrieving people: Identifying potential answerers in
4
5 Community Question-Answering", *Journal of the Association for Information Science*
6
7 & *Technology*, Vol. 69 No. 10, pp. 1246-1258.
- 8
9
10 Leetaru, K. (2018, Oct 9). Can We Finally Stop Terrorists From Exploiting Social Media?
11
12 Available at [https://www.forbes.com/sites/kalevleetaru/2018/10/09/can-we-finally-](https://www.forbes.com/sites/kalevleetaru/2018/10/09/can-we-finally-stop-terrorists-from-exploiting-social-media/#1c101bc96d80)
13
14 [stop-terrorists-from-exploiting-social-media/#1c101bc96d80](https://www.forbes.com/sites/kalevleetaru/2018/10/09/can-we-finally-stop-terrorists-from-exploiting-social-media/#1c101bc96d80) (Accessed 24 Oct 2019)
15
16
- 17 Lewis, S.P., Rosenrot, S.A., and Messner, M.A. (2012). "Seeking validation in unlikely
18
19 places: The nature of online questions about non-suicidal self-injury", *Archives of*
20
21 *Suicide Research*, Vol. 16 No. 3, pp. 263-272.
22
23
- 24 Li, L., He, D., Zhang, C., Geng, L., and Zhang, K. (2018). "Characterizing peer-judged
25
26 answer quality on academic Q&A sites: A cross-disciplinary case study on
27
28 ResearchGate", *Aslib Journal of Information Management*, Vol. 70 No. 3, pp. 269-
29
30 287.
31
32
- 33 Lomas, N. (2018, April 6). Twitter claims more progress on squeezing terrorist content.
34
35 Available at <https://techcrunch.com/2018/04/05/twitter-transparency-report-12/>
36
37 (Accessed 24 Oct 2019)
38
39
- 40 Lu, H.P., and Hsiao, K. (2007). "Understanding intention to continuously share information
41
42 on weblogs", *Internet research*, Vol. 17 No. 4, pp. 345-361.
43
44
- 45 March, E., and Marrington, J. (2019). "A qualitative analysis of Internet trolling",
46
47 *Cyberpsychology, Behavior, and Social Networking*, Vol. 22 No. 3, pp. 192-197.
48
49
- 50 McKeown, C. (2017). "Facebook, defamation, and terrorism: Who is responsible for
51
52 dangerous posts on social media?" *Tulane Journal of International and Comparative*
53
54 *Law*, Vol. 26 pp. 163-187.
55
56
- 57 Miles, M.B., Huberman, A., and Saldana, J. (2013). *Qualitative data analysis*. Thousand
58
59 Oaks, CA: Sage.
60

- 1
2
3 Mondal, M., Silva, L.A., and Benevenuto, F. (2017). "A measurement study of hate speech in
4 social media" in *Proceedings of the Conference on Hypertext and Social Media 2017*
5
6 New York, NY: ACM, pp. 85-94.
7
8
9
10 Oh, S. (2011). "The relationships between motivations and answering strategies: An
11 exploratory review of health answerers' behaviors in Yahoo! Answers", *Proceedings*
12
13
14
15
16
17 Preece, J., & Shneiderman, B. (2009). "The reader-to-leader framework: Motivating
18 technology-mediated social participation", *AIS Transactions on Human-Computer*
19
20
21
22
23
24 Roy, P.K., Singh, J.P., Baabdullah, A.M., Kizgin, H., and Rana, N.P. (2018). "Identifying
25 reputation collectors in community question answering (CQA) sites: Exploring the
26 dark side of social media", *International Journal of Information Management*, Vol. 42
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Silverman, D. (2013). *Doing qualitative research* (4th ed.). London, UK: Sage.
- Slag, R., Waard, M., and Bacchelli, A. (2015). "One-day flies on Stack Overflow: Why the vast majority of Stack Overflow users only posts once", in *Proceedings of the Mining Software Repositories Working Conference* New York, NY: IEEE, pp. 458-461.
- Steinbach, M. (2016). "ISIL online: Countering terrorist radicalization and recruitment on the internet and social media", *FBI News*, 6 July. Available at <https://www.fbi.gov/news/testimony/isil-online-countering-terrorist-radicalization-and-recruitment-on-the-internet-and-social-media-> (accessed 14 April 2019).
- Strauss, A., and Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: Sage.
- Suler, J. (2004). "The online disinhibition effect", *Cyberpsychology & Behavior*, Vol. 7 No. 3, pp. 321-326.

1
2
3 Suzuki, J. (2018). "Indonesia grapples with terror threat as Islamic militants return". *Nikkei*
4
5 *Asian Review*. 15 May, Available at <https://asia.nikkei.com/Politics/International->

6
7 [Relations/Indonesia-grapples-with-terror-threat-as-Islamic-militants-return](https://asia.nikkei.com/Politics/International-Relations/Indonesia-grapples-with-terror-threat-as-Islamic-militants-return) (accessed
8
9 15 April 2019).

10
11
12 Taleb, N. (2007). *The black swan: The impact of the highly improbable*. New York, NY:
13
14 Random House.

15
16
17 Weimann, G. (2012). "Lone wolves in cyberspace", *Journal of Terrorism Research*, Vol. 3
18
19 No. 2, pp. 75-90.
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Table 1: Themes and innocuity of questions with examples from each sub-theme.

Themes	Innocuous Questions	Sensitive Questions	#
Terrorist-centric	22/53 <ul style="list-style-type: none"> Seeking facts on terrorism: "Who exactly created ISIS?" 	31/53 <ul style="list-style-type: none"> Showing interest in the clandestine life of extremists: "How come terrorists scream 'Allah Akbar'...before they behead someone or blow up?" Fostering extreme attitude: "Does Austria want to be part of the new Islamic caliphate?" 	53/300 (17.67%)
Consequence-centric	55/155 <ul style="list-style-type: none"> Inquiring the impact on global travel: "What country ... [is safe from terrorism] to go to a holiday?" Inquiring the impact on personal identity: "Will you see me as a terrorist because I am a Muslim?" Inquiring on social impact: "Does terrorism lead to adolescent depression?" 	100/155 <ul style="list-style-type: none"> Mixing terrorism with religion: "...beside(s) being a terrorist...what have your filthy Islamic followers contributed to the society and science in recent times?" Mixing terrorism with social fault-lines: "Is gay marriage more evil than ISIS?" 	155/300 (51.67%)
Action-centric	60/124 <ul style="list-style-type: none"> Looking to governments: "Should the U.S and Russia fight together to destroy ISIS?" 	64/124 <ul style="list-style-type: none"> Stoking violent attitudes in dealing with terrorist: "What is the best way to slaughter a Muslim terrorist?" Referencing Trump's policy: "Do you ag(r)ee with Donald Trump that we should ban Muslims coming from countries seized by ISIS, Al Qaeda and other terrorists?" 	124/300 (41.33%)

Note. Numbers with respect to question themes add to more than 100% because one question could be coded into multiple themes.

Table 2: Characteristics of answers to questions of each theme.

Questions		Answers					
Themes	Innocuity	#Ans	DIR %	EMO %		VER %	COM
				+	-		
Terrorist-centric questions (N=53)	Innocuous (n = 22)	162	72.84	0	14.20	2.47	U: 1.49 ± 1.47 D: 1.06 ± 1.43
	Sensitive (n = 31)	231	60.17	0.86	21.64	1.30	U: 1.01 ± 1.27 D: 0.62 ± 1.09
Consequence-centric questions (N=155)	Innocuous (n = 55)	402	69.65	2.98	16.67	1.49	U: 1.15 ± 1.44 D: 0.78 ± 1.37
	Sensitive (n = 100)	785	67.89	2.16	23.57	1.91	U: 1.21 ± 1.51 D: 0.94 ± 1.30
Action-centric questions (N=124)	Innocuous (n = 60)	428	72.20	0.70	21.50	0.93	U: 0.85 ± 1.20 D: 0.68 ± 1.13
	Sensitive (n = 64)	483	67.70	2.89	25.67	3.31	U: 1.26 ± 1.75 D: 0.82 ± 1.27

Note. Numbers with respect to question themes add to more than 300 because one question could be coded into multiple themes. #Ans = Number of answers; DIR % = Percentage of Directed answers; EMO %: “+” = Percentage of positively emotive answers, “-” = Percentage of negatively emotive answers; VER % = Percentage of verifiable answers; COM = Community Approval. U = UpVotes, D = DownVotes, for which the means and the standard deviations are reported.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Aslib Journal of Information Management

Table 3: CQA content as a function of users' anonymity.

Questions		Askers		Answers									
Themes	Innocuity	A	N	A					N				
				T	D	+	-	V	T	D	+	-	V
Terrorist-centric questions (N=53)	Innocuous (n = 22)	5	17	26	14	0	3	1	136	104	0	20	3
	Sensitive (n = 31)	14	17	41	24	0	9	0	190	112	2	41	3
Consequence-centric questions (N=155)	Innocuous (n = 55)	17	38	67	38	0	3	0	335	242	11	56	6
	Sensitive (n = 100)	55	45	122	82	3	35	4	663	451	14	150	11
Action-centric questions (N=124)	Innocuous (n = 60)	14	46	71	49	2	10	2	357	260	1	82	2
	Sensitive (n = 64)	30	34	70	46	2	22	0	413	281	12	102	8

Note. Numbers with respect to question themes add to more than 300 because one question could be coded into multiple themes. A = Anonymous; N = Non-Anonymous; T = Total number of answers, D = Number of direct answers; "+" = Number of positively emotive answers; "-" = Number of negatively emotive answers; V = Number of verifiable answers.