

**The Role of Social Media in the ISIL-West Crisis:  
A Technoethical Analysis of Twitter**

Research Paper

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## **Abstract**

This research paper investigates the role of social media platforms during the ISIL-West crisis. The crisis emerged due to the clash between the ideologies of ISIL and “the West”, resulting in manageable, but unresolvable competing interactions. The increasing use of social media within today’s society has prompted the opportunity to further understand the role of crisis communication. This study identifies insights into the crisis communication process that is facilitated through Twitter. The theory of technoethics is utilized to assess the ethical conduct of these communicative activities as a crisis unfolds; ultimately examining the ways that social media communication conforms to ethical standards. Based on a qualitative content analysis of 200 tweets relating to the ISIL-West crisis, the findings uncover the strategies employed by Twitter users in disseminating various types of crisis communication information online. As well, the findings discuss the perceived trustworthiness of Twitter users, and the level of ethicality used to conduct crisis communication pertaining to the ISIL-West crisis. These findings provide valuable insights into the way society discusses and engages in a crisis through social media outlets, leading to new opportunities to explore communication intentions and practices through technology channels.

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## **Introduction**

### ***Background***

This research paper is an evaluation into the role of social media as a communicative platform during a crisis; specifically, the paper considers Twitter and its role in facilitating crisis communication. The purpose is to determine how social media users communicate during a crisis through social networking sites, such as Twitter. Social media has a significant presence in daily communication routines (White, 2012).

Therefore, this is an important and relevant topic to consider and evaluate for future growth, understanding, and knowledge into the way crisis communication takes place across social media channels. As a result, the implications and discoveries from this research contribute to the development and enhancement of crisis communication through social media platforms.

With the role of social media and technologies affecting the way communication takes place, it is imperative to enhance knowledge surrounding society's communication practice, especially during a crisis. Computer-mediated communication is one of the primary forms of communication taking place today, ultimately affecting the way conversations, information-sharing, and daily interactions occur (Weller, Bruns, Burgess, Mahrt & Pushmann, 2014). Furthermore, crises are ever-present within society, often with the potential for devastating effects. With a shift towards technological communication practices occurring across social media platforms, as well as the increasing crisis between the Islamic State in Iraq and the Levant (ISIL) and "the West", the intertwining of these areas of focus presents a relevant and interesting opportunity upon which to conduct research.

### ***Research Problem and Importance of Study***

The research is applied to a specific crisis, which is occurring between ISIL and “the West” as a result of the unresolvable clash of ideologies between the two parties. This case is used as the focus of the research, evaluating the way Twitter users communicate about the unfolding ISIL-West crisis. The research aims to recognize and understand 1) (mis)communication patterns 2) the perceived credibility of Twitter users, and 3) the role of technoethics in conducting Twitter crisis communication surrounding this crisis.

The various crisis communication strategies and patterns that are employed and developed as this crisis unfolds emerge in the research to provide valuable learning opportunities to strengthen existing understandings of communication. By recognizing these traits, the research seeks to identify how Twitter users are communicating about the ISIL-West crisis. Additionally, the objective of this research is to gain an understanding into the perceived trustworthiness and credibility of social media users. This is determined by exploring and evaluating how social media users engage with each other. This will enable the ability to understand attributes which lead social media contributors to trust other users as credible and honest communicators. Finally, the research considers the role of ethical communication by applying a technoethical perspective to tweets to determine how ethically or unethically social media users are behaving and conducting communication on Twitter.

This paper progresses through the following sequences. First, a literature review is presented to lay the foundation for knowledge surrounding crisis communication, technoethics, social media, and the ongoing crisis between ISIL and “the West”. Next, the paper progresses to the methodology. This section conceptualizes the significant

topics relevant to the research. The methodology section lays out the research design and the research questions to be addressed in this paper. Within the methodology, the paper positions the data collection and analysis techniques, identifying the data collection methods, sampling strategy, ethical considerations while researching, and how the data will be analyzed. Following this section, the findings address the analyzed data by presenting new insights, discoveries, and knowledge resulting from the content analysis. This is presented in three steps: first, acknowledging the (mis)communication patterns in the tweets analyzed; second, assessing the perceived credibility of Twitter users through tweet reception and engagement; and third, considering the role of technoethics in the creation and dissemination of tweets and Twitter users within the popular social media platform. To conclude, the paper addresses the overall findings and their subsequent implications, as well as their contributions to future research opportunities resulting from the findings.

### **Literature Review**

Communication is an essential process within society that has undergone changes, developments, and progressions as society evolves. The introduction and development of technological capabilities has significant impacts on the way human communication takes place (Macefield, 2009). Face-to-face interaction is no longer the predominant form of communication in today's society. The rise of the Internet led to new communicative capabilities; computer-mediated-communication (CMC) developed a significant position within society to facilitate discussion and dialogue. Consequently, there is more significance to the ethical obligation to communicate in accordance with ethical and moral guidelines already prevalent within society. However, due to the relative newness

of technology, the ethical guidelines and subsequent enforcement are underdeveloped and lack understanding by technology users. In discussing the ethical imperatives of technology, Charlesworth and Sewry (2009) acknowledge the difficulty in identifying a set of ethical standards relating to CMC due to the ever-changing technology.

The literature is divided into four sections. A foundational background of crisis communication in accordance with the structures and processes of communicating in terrorism and crises situations is necessary in order to shed light on the methods and intentions of communication. Identifying a clear and thorough definition of the theory of technoethics is important to understanding the role of ethics in technological communication. In doing so, this will ultimately enable the conceptualization of the theory in everyday practice as an ethical evaluation tool. Furthermore, evaluating social media as a communicative tool and platform in today's technologically progressive society is pivotal to assess the ways communication takes place through social media channels and across various technological networks. Lastly, a historical and current background surrounding ISIL is necessary to understand the development of the ISIL-West crisis. This is established by assessing the history and present role of ISIL within a global context to present a well-rounded depiction of current ISIL tensions.

### ***Crisis Communication***

Although communication is a central component of human existence, the way communication is facilitated during a crisis may occur with varying intentions, understandings, and processes (Walker, 2012). A crisis is “a serious threat to the basic structures or the fundamental values of a social system which – under time pressure and highly uncertain circumstances – necessitates making critical decisions” (Rosenthal, Hart

& Charles, 1989: 10). This definition is appropriate for this research due to its focus on the immediacy, uncertainty and vulnerability of a crisis. The route of the word “crisis” is “to decide” (Bokhari, cited in Eid, 2008: 30). In all crises, imperative decisions must be made to deescalate the situation. Often, these decisions are accompanied by four stages: “centralization, elevation, optimization, and lack of information” (Eid, 2008: 31). These stages take crisis decision-makers through various phases to facilitate knowledge sharing in order to take on more informed, appropriate crisis-response strategies (Shaw, Burgess, Crawford & Bruns, 2013).

Bell (2010) approaches crisis communication by evaluating varying perspectives and insights into the role of communication in response to a crisis, including the importance of effectively sharing information. Crisis communication is universal, and “provides a starting point for the responsiveness necessary to keep human conversation going” (Ibid: 153). Regardless of the platforms to maintain human conversation throughout a crisis, she acknowledges that across varying studies, the following themes emerge around crisis communication: the centrality of communication, applying an audience-centered focus to response, and the importance of culture to crisis response (Ibid).

Communication plays a key and central role during a crisis, particularly as a crisis unfolds, as well as following the aftermath of a crisis. Due to the various structures through which a crisis can occur, the role of communication has a central influence on a crisis, regardless of the crisis structure (Walker, 2012). Identifying and understanding communication patterns is an important component in understanding crisis communication. Communication patterns exist through the ways in which users engage

with a platform to disseminate and consume information, with a specific trend facilitating such behaviours (Chen, 2010). The relativity of communication patterns to crisis communication is delivered through interactive and ongoing communication updates and commentary surrounding a crisis. These patterns are significant to developing an understanding into crisis communication because of the insight they may provide, revealing the motivating factors that may cause one to engage with and contribute to such communication. It is important to work towards identifying the “need for communication during a crisis” (Seeger et al., cited in Bell, 2010: 144). Therefore, identifying the need for communication, and the role of communication during a crisis are important factors necessary to the decision-making process and subsequent handling of the crisis. Consequently, it is important “to understand how communication contributes to the maintenance of decisional vigilance, or the ability to make decisions that will prevent or lessen the effects of a crisis” (Bell, 2010: 144). Through scholarly analysis of previous studies, a link is identified “between the field of public relations and crisis communication” (Ibid).

By implementing an audience-centered response to crisis communication, practitioners are applying a public relations strategy. In doing so, the audience-centered response enables a clear link between communication and crisis, ultimately supporting more effective crisis response strategies (Bell, 2010). By considering the audience and the targeted receivers of communication strategies, a crisis response holds increased relatability and relevancy, leading to more effective crisis communication and responsiveness. Furthermore, the role of an audience-centered focus to crisis

communication takes on not only a public relations approach to crisis response, but also a cultural response to crisis communication.

In addition to the necessary considerations required of effective crisis communication such as adapting centrality and an audience-centered focus, it is important to consider cultural factors in a crisis response. The attention to culture in crisis communication strategies is often undervalued and neglected. Culture plays a significant role in the negotiation of everyday social communication online and thus should be considered when communicating about a crisis (Walther et al., 2010). The perspective of culture should be evaluated more frequently in crisis communication because “culture provides a lens for understanding how audiences respond to a crisis” (Bell, 2010: 147). Assessing and understanding crisis response strategies and techniques may enhance research by undertaking a cultural perspective. Accordingly, Lee suggests that an evaluating culture as a factor in crisis communication will enhance knowledge of the audience orientation approach to crisis communication. This is a useful technique because “when each party is a member of a unique culture, the parties co-construct and co-determine the forms of dialogue, the crisis situation, and crisis handling, allowing for a collaborative cultural model” (2005).

Due to the rise of technology, crisis communication has evolved from traditional theories to a more modern approach. Traditional theories are less applicable in terrorism-related crisis, such as the ISIL-West crisis. Since traditional linear forms of crisis communication are less valid, alternatively, communication requires a “dynamic” information diffusion process in crisis communication related to terrorist actions (Falkheimer, 2014). Historically, the role of crisis communication has been viewed as the

“transmission of information”, indicating linear lines of communication (Ibid: 55). These linear lines of communication are effective tools for information dissemination during traditional crisis wherein the “notion of crisis as the consequence of a single cause, confined to one organization, characterized by a clear beginning and end” (Seeger et al., cited in Falkheimer, 2014: 55).

Modern approaches to crisis response are becoming more prevalent within society, as demonstrated by the “dynamics” involved in a modern crisis, such as terrorist attacks, which are characterized by “multiple causations, varying dynamics and the involvement of different actors in several areas” (Boin, 2009: 367). Terror attacks are characterized as crisis communication from three perspectives: 1) terror attacks are an obvious crisis due to their longevity, chaos, and subsequent unsettlement; 2) terrorist attacks have strong communicative dimensions and target democratic politics, ultimately undermining public confidence; and 3) terrorist attacks may harm the reputation of organizations (Canel & Saunders, 2010). This characterization of terror attacks is relevant to the research because it identifies the qualities, components, and strategies of terrorism related activity. By identifying and acknowledging how terrorism evolves as a form of communication, the research is better positioned to identify the role of technological platforms in this communication process.

The dynamic information diffusion process is used to characterize terrorism attacks due to the need for immediate response and “improvisation” (Falkheimer, 2014: 55). The three perspectives identify terrorism as a modern crisis as opposed to a traditional crisis due to the multitude of actors involved, as well as the multiple platforms engaged. This helps identify links between both terrorism and communication.

Consequently, the evolution of crisis communication from traditional theories, citing one actor with a beginning and an end, to modern approaches, citing many actors with many opportunities, lies partially in the role of terrorist operations and the subsequent communicative responses (Ibid).

With various types of crises, the Social-Mediated Crisis Communication (SMCC) model serves to identify the importance in adapting the most appropriate crisis response through form and source (Jin, Fisher Liu & Austin, 2014). The SMCC model demonstrates that “crises can be sparked and spread online through a variety of social media platforms and offline social interactions” (Briones et al., cited in Jin, Fisher Liu & Austin, 2014: 77). Ultimately, the model identifies five factors that affect crisis response: crisis origin, crisis type, infrastructure, message content, and message form (Jin, Fisher Liu & Austin, 2014: 77). These evaluators consider various situational factors, which may affect the way crisis response takes place. The model indicates, “selecting the appropriate crisis message strategy is a function of form and source” (Ibid: 80). The form consists of how the message is conveyed and the source accounts for the message platform (Ibid). These factors are useful for appropriating the best response and strategy for crisis communication.

The role of form and source in crisis response has led to the identification of important realms for expanding knowledge. With new social networking sites, in accordance with the SMCC model, there are new ways to present form and source in order to respond to a crisis. The progressing social networking systems, “are changing the way people communicate . . . during disasters” and therefore “it makes sense to explicitly consider the best of leveraging these communication channels” (Merchant, Elmer &

Lurie, 2011: 290). The role of different technological communication channels contributes to the framing and interactivity of crisis communication (Wasike, 2013). Subsequently, source and form are pivotal components to the appropriate handling of crisis communication to ensure immediate message dissemination and the liquidity of crisis communication to appropriate audiences.

### ***Technoethics***

Since the development of the computer in the 1940's, efforts have been made to examine computer ethics from varying perspectives in order to establish an ethical foundation to guide technological conduct (Charlesworth & Sewry, 2009). Due to the ever-changing computer technology and capabilities, difficulties arise in developing a universal definition of computer ethics. The ongoing ability to publically create and produce one's own content through the Internet is challenging the ability to identify and define ethical terms and boundaries within the online world, especially when communicating around a crisis (Sellnow, Sellnow & Venette, 2012). In order to overcome this difficulty, there must be a sound ethical foundation surrounding technology. Cortes Pascual identifies the importance of developing "a realistic perception of ICT . . . the user's responsibility, and . . . the inclusion of technoethics education" (2009: 228).

It is important to incorporate media ethics as a means to set "standards against which conduct can be measured and evaluated" which should be used to enforce the moral and ethical behaviours across various platforms (Eid, 2008: 92). Here, the dilemma that occurs regarding ethics lies not only among the people who use the content, but also the producers involved in creating the content. Luppicini and Dakrouy discuss the "search for global ethical values in the new informational environment", calling for a mitigation

of “potentially negative impacts on society and its citizens” (2015: 379). Therefore, it is important to first identify an ethical standard upon which all users involved in the process of creating, publishing, disseminating and consuming self-produced content should comply. Applied ethics is the practice of enforcing morality which requires consistent monitoring of online behaviour in compliance with computer ethics. However, due to the vastness of the Internet, it is difficult to monitor and enforce ethical activities across the Web 2.0 (Thorson, Vraga & Ekdale, 2010). As technology progresses, new advancements are slowly contributing to growth in this field, but there are still strides to be made to enforce the ethical use of online engagement and activity (Lupplicini & Dakroury, 2015).

Technoethics is a term coined to reflect the “interdisciplinary field concerned with all ethical aspects of technology” (Lupplicini & Adell, 2009: 4). More specifically, this accounts for conscience, egoism, duty, respect, rights, utilitarianism, justice, and virtue ethics (Charlesworth & Sewry, 2009). Technoethics considers the ethical actions of technological conduct by assessing rules, regulations, and moral guidelines set within society. Technoethics undertakes “old ethical questions of privacy and free speech” by giving them new meaning and urgency within a technologically centered society (Lupplicini, 2009b: 2). Consequently, technoethics asserts, “technology should be moderated by moral and social controls and that the pursuit of such technology related issues requires special consideration and expertise” (Ibid: 2).

This theory is useful in connecting individual knowledge bases to the common theme of technology (Lupplicini, 2009b). It acts as a universal “umbrella for grounding all sub-areas of applied ethics focused on technology related areas of human activity” (Ibid:

2). In today's technologically progressive society, the concept of technoethics holds significant value due to its ability to be

assigned certain rights and responsibilities from the designer and developers of technology as well as those affected by it. Technoethics recognized that there are important ethical considerations when addressing the conduct of an individual with or without a specific technology.

(Luppicini, 2009b: 3)

Consequently, the framework of technoethics is a useful tool for “past, present, and future work in technology and ethics”, further supporting the usefulness for this research

(Luppicini, 2009b: 3).

There are multiple ethical perspectives to consider and address when developing ethical guidelines (Bowen, 2013). At the forefront is the importance of developing ethical guidelines with the consideration of the pragmatist oriented approach, however, there is also a prevalence for a deontological ethical consideration (Ibid). In addition to a technoethical lens, “the deontological perspective . . . dovetails perfectly with the attempt to create ethical guidelines for use in social media to use across cultures, platforms, and situational specifics” (Ibid: 124).

Applying a technoethical analysis to societal events will identify ethical components that may not be immediately relevant or recognizable. It is important to note that a technoethical inquiry is not limited to a specific set of data collection, but may include a “variety of qualitative, quantitative, and mixed methods research approaches” (Luppicini, 2009a: 17). Luppicini identifies the follow guidelines for a technoethical inquiry: society is a “self-producing technological system”, the meaning of technology arises from the “intermediation of technology and human agency within various social sub-systems” and, a successful technoethical inquiry will arise when “a shared

understanding/knowledge is demonstrated concerning relevant ethical aspects of system operations with no new knowledge emerging” (Ibid). A technoethical analysis is relied on for increasing knowledge and understanding necessary for appropriate decision-making and actions in a technologically focussed society (Ibid).

### ***Social Media***

Social networking sites are a relatively new phenomenon that came to rise with the growth of the Web 2.0. It can be said with confidence that “Twitter has made a significant impact on the ways in which individuals around the world communicate” (Bowdon, 2013: 37). First emerging in 2006, Twitter has adapted alongside technological capabilities to become a useful social media platform to conduct immediate and direct communication due to its ease of use, accessibility, immediacy, and to-the-point message dissemination due to a 140-character message limitation (Chen, 2010). Although social networking sites such as Facebook, Twitter and Instagram receive more attention, social media includes a wider range of platforms in addition to these traditional social networking sites (Veil, Buehner & Palenchar, 2011). These platforms include blogs, micro-blogs, forums, and Wikis. (Austin, Fisher Liu & Jin, 2012).

Social networking sites are defined as “online environments where people create a profile about themselves and make links to other people on the site, creating a web of personal connections” (boyd & Ellison; Donath & boyd, cited in Chen, 2010: 756). Social media users are turning to Twitter as an outlet to channel “peer-to-peer communication” (Cho & Park, 2013: 28). Among these platforms, users develop relationships online through the sharing of posts, commentary, videos, photos, blogs, and more (Schultz, Utz & Göritz, 2011). Most social networking sites have a tendency to peak in popularity and

face a subsequent decline. However, Twitter, a leading social networking site, has maintained popularity among users since its launch in 2006 (Chen, 2010).

The rise of social networking sites has changed the way that communication takes place. More and more, individuals are turning to social media to express themselves through posts, images, videos, links, and engaging in online discussion (Bruns & Stieglitz, 2013). These can center on a variety of topics, including politics, education, popular culture, and crises (Murthy, 2013). Due to the vast tools for sharing and engaging with social media across different platforms, the way society is engaging with social networking sites is consequently influencing social interactions and communication patterns globally (Meuleman & Boushel, 2014). The apparent trustworthiness of these expressions has yet to be identified. The variety of message dissemination capabilities, the multitude of online personas existing within the realms of social media, and the ability to create and distribute online content can lead towards users' skepticism of the credibility and trustworthiness of online commentary and publications through social networking sites (Lomborg, 2012).

Recent research shows that “young adults’ motivation for use of newer communication technologies is related most to their need for connectedness, but all to their need for self-expression” (Austin, Fisher Liu & Yan, 2012: 190). When discussing the role of crisis communication through social media, it is observed that many technology users are turning to social media to communicate with other users about a crisis (Ibid). To evaluate the role of social media use within crisis communication patterns, this requires an understanding into the factors driving individuals to use social media in times of crisis. Ultimately, influences that drive social media users to

communicate about the crisis through Twitter are identified as methods to fulfill the desire of inclusion and connectivity.

The role of social media usage has undergone some research to evaluate the use, role, and effect of various social media platforms on the communication outcome (Bowdon, 2013); additionally, “the extensive reach of social networks allows people . . . to rapidly connect” (Merchant, Elmer & Lurie, 2011: 291). Although social media are a relatively new sensation, their usefulness as a communication tool in any situation has irrefutably changed the traditional communication process (Jackson, 1997).

### ***Case Study: ISIL***

The Islamic State in Iraq and Levant (ISIL) has developed a well-known presence across media platforms due to the ongoing crisis that the combative group is engaged in with “the West”. The crisis has been ongoing for a decade, and has recently found enhanced media attention due to ISIL’s desire to establish itself as a Caliphate. The recent events between ISIL and “the West” have unfolded as a result of an ongoing battle for power.

The dramatic victories in summer 2014 of the Islamic State in Iraq and Syria (ISIS) over rival groups fighting the regime of Bashar al-Assad – and over the government of Iraq and Kurdish forces – culminated in the declaration of a caliphate, or the Islamic State.

(Hashim, 2014: 69)

According to Jabareen, “this phenomenon has the power to dramatically transform the geopolitical settings of the Middle East and have far-reaching effects on a global level” (2015: 52).

The rise to global attention that ISIL receives is due in part to its “emergence as major force in the struggle for the future of Syria and Iraq” (Terril, 2014: 13). This presence garners significant media attention due to the military force taken on in order to

capture control of both countries. In recent years, ISIL has made significant strides to advance its power and position in its fight against “the West”. ISIL’s military front is well equipped and well trained with expert military personnel. Additionally, ISIL’s strengths lie in other places, including its ability to “tap into Sunni Arab fears and resentment of Shi’ite leadership in Iraq and Alawite leadership in Syria” (Ibid: 16). Due to the role of the United States military in developing the “de-Ba’athification program”, a program which would eliminate Sunni Arab identities, the “polarization created by this situation created an ideal opening” for ISIL (Ibid: 17). Furthermore, ISIL has strong financial independence and supplementary reserves “as a result of an ongoing strategy to reduce or eliminate dependence on private foreign donors”, which focusses on imposing taxes and smuggling (Ibid: 17). Another strengthening force behind ISIL is the recruitment platform within the organization. The powerful military behind ISIL has been able to absorb “smaller radical groups in the area” through financial influence (Ibid: 19). Other influential recruiting techniques arise through a sophisticated media strategy (Farwell, 2014). The recruitment capabilities of ISIL are stronger and farther-reaching as a result of social media tactics (Ryan, 2014).

The Islamic State adopts specific language in its communication in order to have a significant and lasting effect on the daily lives it controls (Jabareen, 2015). Additionally, while ISIL claims to be a “true Islamic group”, its operations and actions “significantly violate fundamental Islamic tenets” (Sorenson, 2014: 25). Consequently, ISIL uses Islam to recruit and motivate members, a technique that adopts some form of influence and manipulation. As a result, according to Sorenson (2014), the world sees this reflected across various communication strategies in the media through video messages,

Twitter hacks, and social commentary. As ISIL initiates new communication campaigns through social media, the US is launching media campaigns to counter ISIL (Ryan, 2014).

Not surprisingly, the rising crisis between ISIL and “the West” has led to media frenzy. Through social media discussion of ISIL’s communication, insights develop around the stance that the Islamic State rejects the existence of “other” religious beliefs and perspectives (Jabareen, 2015), consequently fueling the ongoing discussion of this crisis through various technological platforms (Farwell, 2014). ISIL has launched a “slick social media campaign offering all the advantages of jihad” (Sorenson, 2014: 26). As new campaigns are launched, both to promote and counter ISIL, many users are taking to Twitter to engage in dialogue surrounding the crisis; both one-way communication and two-way communication are employed to share commentary, opinions, news sources, images, videos, and engage in ongoing discussions relating to ISIL and its recent activity (Ryan, 2014). Despite the US’s campaign to counter ISIL’s communication, ISIL's effort to recruit new members is escalating exponentially, with apparent success (Sorenson, 2014).

In sum, many technology users are turning to social media to communicate with others about the crisis. The rising crisis between ISIL and “the West” has consequently made media headlines (Farwell, 2014). As such, the rise of the Internet has created new communicative capabilities, often times leading individuals to utilize social media platforms to express themselves (Brummette & Sisco, 2014). Research identifies the following themes which have emerged around crisis communication: the centrality of communication, applying an audience-centered focus to response, and the importance of

culture to crisis response (Bell, 2010). However, due to the newness of social networking technologies, the ethical guidelines and subsequent enforcement are underdeveloped and lack a clear understanding. With the aforementioned definition of crisis at the forefront, the research analyzes Twitter content during the ongoing ISIL-West crisis to assess emerging communication patterns as a result of technologically facilitated communication.

### **Methodology**

Conducting a qualitative analysis of social media content based on relevant theory benefits the research and current understandings of the role of social media as a communicative platform to facilitate crisis communication. Utilizing a technoethical perspective (Luppicini & Adell, 2009) establishes a foundation through which to analyze social media content with ethical considerations at the forefront. This perspective also enables an in-depth analysis into the role of Twitter as a communication facilitator. The research adapts a qualitative approach; Hancock states, “qualitative research is concerned with developing explanations of social phenomena” (1998: 2) and is a method of research where “issues of the richness, texture and the feeling of raw data” are of utmost importance, accompanied by an “inductive approach [which] emphasizes developing insights and generalizations” (Eid, 2011a: 7). The interest this research holds in communication practices through social networking sites makes qualitative research an appropriate method through which to analyze this case. Utilizing three open-ended research questions to explore communication patterns, communication ethicality, and the perceived trustworthiness of Twitter as a knowledge platform, this research seeks to understand how crisis communication occurs through the social networking site, Twitter.

The research utilizes data collected from public Twitter content where platform users post communication and commentary about the ISIL-West crisis.

### ***Concepts and Conceptualization***

This research paper applies a technoethical lens to social media communication during the ISIL-West crisis in order to identify potential communication patterns and activities during an ongoing crisis. The research examines Twitter through a technoethical lens to assess the ethical implications and considerations of communication patterns and strategies related to ISIL. This contributes to strengthening current understandings into the development of communication patterns during crisis communication. Furthermore, this strategy identifies important ethical insights and considerations surrounding the communication process through social media platforms surrounding a crisis. The important definitions for the concepts addressed in this research paper are necessary in order to have a thorough understanding of the terms and perspectives through which they are evaluated. These concepts are: *technoethics*, *crisis*, *communication patterns*, *social media*, *ISIL-West Crisis* and *characteristics of perceived credibility*.

- Technoethics is “an interdisciplinary field concerned with all ethical aspects of technology” (Luppigini & Adell, 2009: 4). This concept is significant in understanding the role of social media as a communicative platform due to its consideration and evaluation of ethical issues related to technological capabilities.
- A crisis is defined as “a serious threat to the basic structures or the fundamental values of a social system which – under time pressure and highly uncertain circumstances – necessitates making critical decisions” (Rosenthal, Hart & Charles, 1989: 10). The role of communication during international political

- crises is significant, acting as a double-edged sword that may contribute to the escalation of the event as much as it may contribute to the contrary (Eid, 2008).
- Communication patterns are identified as the ways in which users engage with a communicative platform to disseminate and consume information, with a specific trend facilitating such behaviours (Chen, 2010). Twitter serves to fulfill these communication patterns by serving as a medium to satisfy users' uses and gratifications (Ibid). Similarly, the relativity of communication patterns to crisis communication is delivered through interactive and ongoing communication updates and commentary surrounding a crisis (Heilbrun, Wolbransky, Shah & Kelly, 2010). These patterns are significant to developing an understanding into crisis communication because they enable new insight relating to the motivating factors that may cause one to engage with and contribute to such communication (Bell, 2010). Furthermore, communication patterns are also identifiable by a lack of clear direction or pattern. If communication is underdeveloped, miscommunication patterns are developed, rather than communication patterns. The miscommunication patterns develop through a disconnect of clear communication routines and patterns between tweets and Twitter users.
  - ISIL is engaged in an ongoing crisis with “the West” due to varying and conflicting religious beliefs and ideologies and the battle over territorial control (Jabareen, 2015). As a result, ISIL conducts extreme communication tactics to garner media attention and deliver its message. Consequently, this contributes to the ongoing crisis communication surrounding ISIL in society and across the globe. The crisis lies in the relations between ISIL and “the West”. Therefore,

ISIL itself is not the crisis; the crisis arose as a result of the ISIL organization and the ideologies of “the West” clashing, resulting in a crisis. This crisis is rooted in major political and religious situations with controllable, but unresolvable issues (Eid, 2014). Lindsey and Williams recognize that the system is destructed, with both parties ultimately going against the others’ values, leading to an incongruent relationship of power with impenetrable barriers preventing a resolution (2013). The ISIL-West crisis continuously fulfills the crisis lifecycle (Pang, Hasson & Chong, 2014). The terrorist actions performed and initiated by ISIL spark retaliation from “the West” due to the conflicting ideologies. The lifecycle peaks and recedes based on the interactions between key players in the crisis on both sides; however, in accordance with Rosenthal, Hart & Charles’ definition of a crisis, there is no resolution to the crisis, only consistent management of the clash (1989).

- Social media are a recent phenomenon that came to rise alongside the Web 2.0 and its increasing capabilities. Twitter is a popular social media platform that emerged in 2006 and has been gaining popularity in society since its inception (Bowdon, 2013). Twitter is a multifaceted platform that enables one-way and two-way dialogue with other platform users in the form of 140-character posts consisting of links, images, text, and videos. Twitter also enables the ability to interact with other users by favouriting tweets, retweeting, and replying to other tweets. The accessibility, immediacy, and ease of use of Twitter facilitate and enable ongoing communication amongst users.

- The way information is communicated through social networking sites may arise in various forms. Platform users are able to divulge information through photo sharing, hyperlink sharing, opinion sharing, video sharing, and memes (Purohit et al., 2014). Within each of these forms, users are capable of disseminating formal and informal information in the public sphere through both credible and incredible sources.
- For the purpose of this research, the term perceived credibility or perceived trustworthiness is defined as content that Twitter users obtain from the collected data which is believe to be valid and reliable content. To determine perceived credibility, the research considers and evaluates favourite and retweet statistics as indicators towards the reliability, trustworthiness, and accuracy of Twitter content. As a result, the credibility of the data will have a direct connection to the individual user that is responsible for the development and production of the content.

### ***Research Questions***

The proposed research paper will seek answers to the following four research questions:

- RQ1: What, if any, communication patterns and crisis communication strategies arise surrounding the ISIL-West crisis on Twitter? What types of information have been utilized? How?
- RQ2: How do Twitter users perceive the trustworthiness of social media commentary surrounding the ISIL-West crisis?
- RQ3: How do the identified communication patterns and strategies comply with technoethical guidelines?

### ***Research Design***

This research paper applies a qualitative research design to assess the role of Twitter use relating to the ISIL-West crisis. Qualitative research “consists of a set of interpretative, material practices that make the world visible” (Denzin & Lincoln, 2000: 5). The rising popularity of Twitter, widespread access to the platform, ease of use, networking capabilities, and both one-way and two-way communication processes available on the platform make Twitter an appropriate social media platform to undergo analysis.

Additionally, the limited 140-character publishing feature ensures that the content shared in tweets is significant and concise. Consequently, the usefulness of this platform enables an exploration of crisis communication through social media, which leads to the identification of communication patterns during a crisis. An important characteristic of qualitative research considers the “use of descriptive language that emerges from the complex narrative of participants” (Jackson, Gillis, & Verberg, 2011: 239).

Consequently, the linguistics aspect of Twitter appropriates the use of a qualitative research design for the research. The research applies a technoethical lens to the evaluation of the data to assess the ethicality of such crisis communication.

### ***Data Collection and Analysis***

The process of collecting data is the practice and ability to collect information that has the ability to shape and refine emerging research questions (Creswell, 2007). Data collection is often pre-determined with minimal opportunity for the research to be influenced during the data collection process. Data collection is an in-depth process that may involve multiple methods that evolve from the initial method, leading to new discovery (Eid, 2011b). The researcher “employs rigorous data collection procedures.

This means that the researcher collects multiple forms of data” (Creswell, 2013: 53). The data collection for this research utilizes strict criteria to allow for a more defined analysis. The criteria uphold the purpose of this research by directing data collection to the specific purpose of the research, identifying communication patterns through Twitter regarding the ISIL-West crisis.

Key studies about the role of crisis communication as well as the role of social media as communicative platforms demonstrate the importance of the role of the communicator. Therefore, this research looks for evidence into the communication patterns developed through communication on Twitter, as well as the communicator’s ethical compliance with Twitter guidelines. In accordance with Eid’s definition of content analysis which states, “when a researcher systematically and objectively identifies characteristics of messages, s\he is using a procedure of data analysis defined as *content analysis*”, this research evaluates communication patterns developed through Twitter users’ communication into the ISIL-West crisis (2011a: 8).

#### *Data Collection Methods*

The research employs a qualitative content analysis to assess crisis communication relating to ISIL through Twitter’s platform to identify ethical compliance with standard communication guidelines, as well as communication patterns that developed throughout the course of the crisis. By utilizing a qualitative data collection technique, the data underwent an in-depth analysis into the content, quality, intent, and position of Twitter posts communicating about the ISIL-West crisis. Public Twitter posts including images, videos, hyperlinks, memes, and text undergo analysis qualitatively in terms of the content relating to the ISIL-West crisis. Consequently, this method of a qualitative content

analysis fulfills the need to gather detailed and effective Twitter posts to lead to the identification of communication patterns. Identifying the communication strategies enabling purposeful sampling acts as a significant step in the research process.

### *Sampling Strategy and Technique*

Given the qualitative design of the research, a non-probability sampling strategy is utilized in order to obtain data to undergo a content analysis through a technoethical lens. To gather this data, a Twitter search for content containing pre-specified hashtags was implemented. To implement this sampling, Twitter content is randomly selected for analysis by conducting a search for tweets with the pre-determined hashtag ISIL or ISIS. These criteria ensure that relevant and accurate Twitter content pertaining to communication about ISIL is gathered. This enables data collection directly related to ISIL to be obtained for analysis. Only posts submitted through publically accessible profiles are used in the content analysis. The use of publically accessible profiles is chosen due to the user's transparency on social media, ensuring compliance with the privacy of secured and private profiles. The research analyzes 200 posts associated with these hashtags during the period of June 2014 to December 2014. This period is selected for evaluation due to the increasing attention ISIL received by the media during this period as a result of the publicized beheading videos conducted by ISIL affiliates. This purposive sampling technique is employed due to its fit as a non-probability technique that renders it capable of retrieving all possible data that fits the designated criteria using various methods (Eid, 2011b). This proves to be an effective technique to use due to its exploratory characteristics enabling the extraction of informative, yet also overlooked content (Ibid).

### *Ethical Considerations*

Data analysis in qualitative research requires preparation, organization, and evaluation of the data in order to be characterized and developed into themes and presented through figures, tables or a discussion (Creswell, 2007). This research uses a structured approach to strategically collect data from public Twitter posts. Chawki acknowledges the newness of ICTs as platforms contributing to the facilitation and engagement of uncensored online conversations and the potential backlash and implication of these communication activities (2010). Due to the sensitivity of the ISIL-West crisis relating to various religious and political beliefs, the research assesses only public profiles. Furthermore, because of the widespread public access of Twitter, these users should already be aware that without privacy settings, content that they develop and publish online is available for the Internet to access. Despite the publicity of these posts, to consider and respect the privacy of Twitter users, the research does not include the names or Twitter handles of any data gathered and analyzed in the content analysis. This serves to protect the users' identity and opinions surrounding the ISIL-West crisis from future backlash, retaliation, criticism, or judgement.

### *Data Analysis Procedures*

The value of qualitative data analysis lies in the ability of the researcher to become “fully immersed in the data in an attempt to bring order and meaning to the vast amounts of narrative that result” (Jackson, Gillis & Verberg, 2011: 242). To analyze the data extracted from the content analysis, the implementation of coding frames are used to “organize the data and identify findings” (Berg, 2011: 220). During the coding process,

“questions and even some plausible answers also begin to emerge”, which should lead to further questions and possible insights (Ibid: 221).

Information from each Twitter post underwent coding strategies to identify the content within a post. The coding aims to identify four characteristics within a post: content, quality, intent, and positioning. Furthermore, the coding seeks to identify the relevancy of content, seeking to determine the depth of validity, including whether a post holds statistical facts, commentary, and/or opinions. Additionally, the content underwent coding to determine the amount of favourites and/or retweets a post received to determine its perceived credibility by other Twitter users.

Finally, the data is also evaluated to determine credibility by identifying “verified” accounts in the data involved in ISIL communication activities through Twitter. Twitter recognizes true and verified account profiles with a blue checkmark, therefore notifying users of the validity of these profiles as a celebrity or recognized public figure (Tune & Levine, 2015: 15). The research evaluates the role of ‘verified’ and ‘non-verified’ accounts in ISIL communication on Twitter to aid in assessing the perceived credibility and validity of tweets during the ISIL-West crisis.

The anticipated results of the research are used to better understand the patterns through which social media users communicate during a crisis, if at all. Additionally, the technoethical lens that is applied to the content analysis enables new ethical insights into communicative techniques facilitated by social media. As a result, the research findings contribute to understanding the way Twitter serves as a communicative platform during a crisis, ultimately leading to new research avenues and insights into the role that

technology plays in communication. The analysis remains flexible to the possibility that additional types of coding may emerge as the data undergoes analysis and revision.

### **Findings and Analysis**

This research considers the role of social media as a communication platform during the ISIL-West crisis. Its purpose is to assess how Twitter users communicate information about the crisis online through the development of various patterns and information sharing, ultimately seeking to understand the role of technoethics in this process. The research questions are designed to gain perspective on the communication patterns and strategies that are used to disseminate information through Twitter during the crisis, to analyze the perceived credibility and trustworthiness of the communication, and to understand the role of technoethics in Twitter communication practices. The Twitter analysis for this research analyzes 200 tweets during the period of June to December 2014. The analysis considers the following eight factors pertaining to each tweet:

- 1) Number of favourites
- 2) Number of retweets
- 3) Verified profile or non-verified profile
- 4) Did the tweet contain a link?
- 5) Did the tweet contain an image?
- 6) Did the content include a personal opinion?
- 7) Did the content include facts or statistics?
- 8) Were there associated hashtags outside of the search requirements?

These eight factors are chosen and employed due to their direct ability to capture content, online response, source, and subsequent effects extracting additional communication

response and engagement. Combined, these eight questions will identify data and information leading to the resolution of the three research questions sought out in this research. The following sections detail the findings.

### ***Communication Patterns and Crisis Communication Strategies***

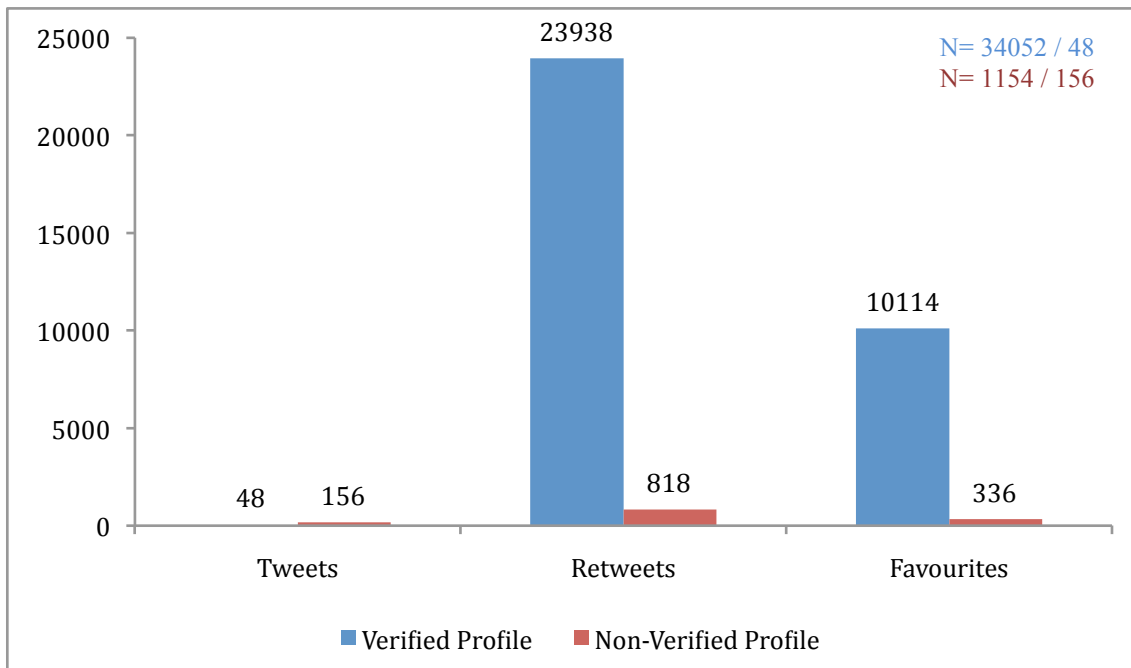
Based on the eight analysis factors, the research seeks to identify strategic communication patterns and crisis communication strategies relating to the ISIL-West crisis. However, because of the non-probability random sampling technique utilized in the data collection method to ensure that the data set is comprised of completely random and disconnected tweets, the research is unable to identify communication patterns; instead, miscommunication patterns are recognizable through to patterns of lacking continuous and coordinated communication. This is because of the clear disconnect between tweets, contributing to the miscommunication patterns identified in the data. The research looks strictly at the individual tweet collected and does not acknowledge or evaluate subsequent responses to or from the data piece. Consequently, because of the data collection method, although the research attempts to evaluate potential communication patterns about the ISIL-West crisis on Twitter, the data identified of clear crisis miscommunication strategies.

The research reveals relevant and distinct crisis communication strategies outlined and identified in the literature review. In accordance with Bell's (2010) perspective on the centrality of communication in a crisis response, the analysis identifies that crisis communication is the initial response to an unstable situation. *Figure 1* illustrates the total number of favourites and retweets that all of the data received. The data is then categorized into verified and non-verified profiles for contrast. *Figure 1* demonstrates the

illustration of the total numbers across portfolio type. Of the 200 tweets examined, there are a total of 23938 retweets across all of the verified tweets, and 10114 favourites across all of the verified tweets (52). Of the non-verified tweets examined, there is a total of 818 retweets and a total of 336 favourites received across the non-verified tweets (148).

**Figure 1:** Retweet and Favourite Total Engagement Indicating Perceived Credibility

Total Number of Favourites and Retweets from Total Data Collection (200 Tweets)



The substantial amount of engagement in retweeting and favouriting the content, regardless of verifiability indicates a willingness by Twitter users to be actively involved and participate in communication surrounding the unfolding ISIL-West crisis.

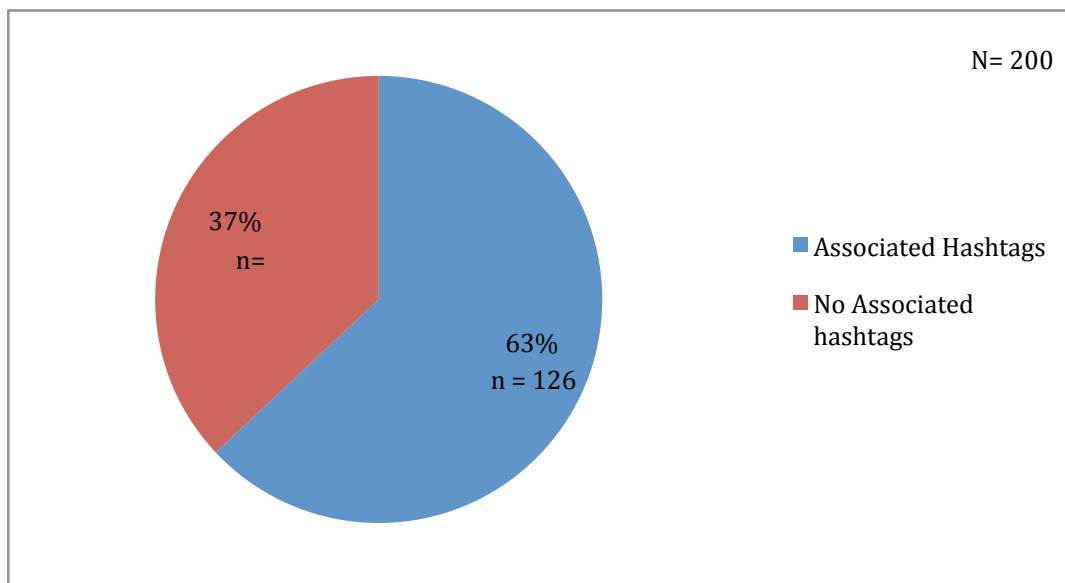
Furthermore, it supports the findings that verified content is perceived to be more credible than non-verified content, as depicted through the figures. The substantial numbers suggest that social media users are actively engaging with other users' Twitter content, frequently retweeting and favouriting the content, indicating a perceived credibility of the originating users' content. These findings reflect Latonero and

Shklovski's perspective that the public's utilization of Twitter during a crisis differs from those directly involved in the crisis (2013).

Accordingly, Bell (2010) acknowledges that crisis communication is central, audience-focussed, and culturally relevant. The findings of the content analysis further support this perspective. First, Twitter, as a social networking site, is a centrally developed platform enabling access to any connected user worldwide. The fact that users take to Twitter to communicate about the ISIL-West crisis demonstrates the interest in sharing a universal message. Additionally, 63% (126) of tweets analyzed contain other associated hashtags. *Figure 2* illustrates the amount of content gathered which used supplementary hashtags in the data. This indicates the intent of the user to reach broader audiences by including additional hashtags to enhance search results through these associated hashtags.

**Figure 2: Associated Hashtags**

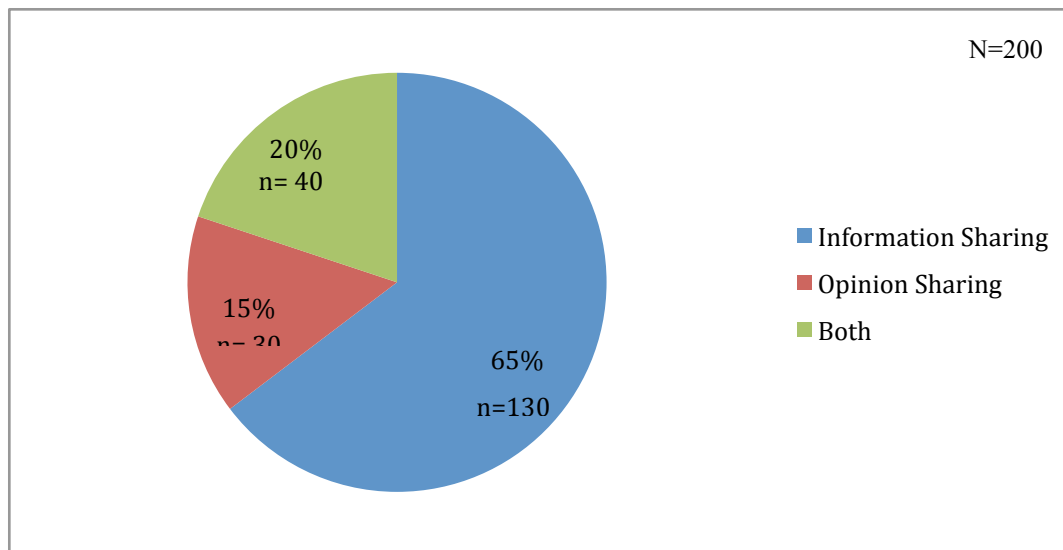
Percentage of Tweets that Contained Additional Hashtags Outside of the Search Requirements



Secondly, the content of the tweets collected demonstrates a clear audience-centered response to the crisis. This is depicted through the intent to reach wide audience using Twitter as the message dissemination platform, due to its vast reach and accessibility. Furthermore, 66% (132) of tweets include relevant information-sharing tactics including an image, link, or reliable news fact. *Figure 3* depicts the communication intent of tweets by assessing the type of content shared within the tweet. These findings indicate that messages are audience-centered due to the intentional targeting of message consumers by sharing relevant and applicable information relating to the ISIL-West crisis through the unique forms of images, links, or reliable news facts.

**Figure 3: Communication Intent**

Type of Content and Communication Disseminated in a Tweet

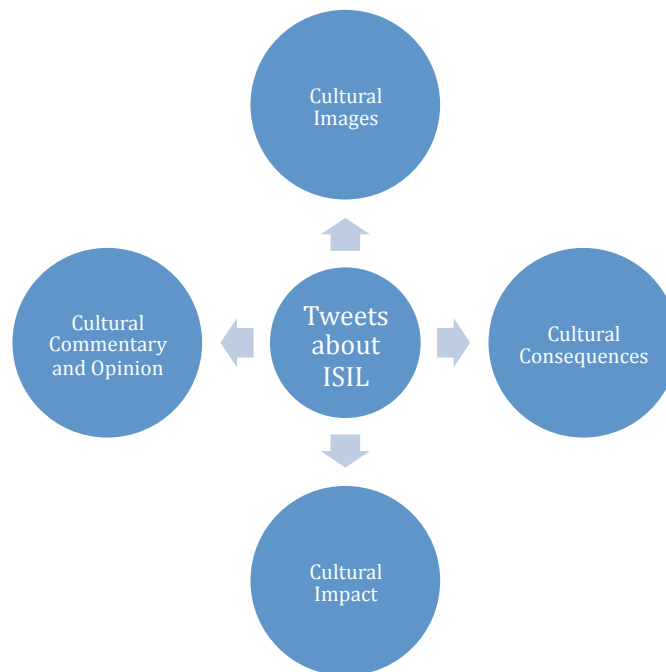


Lastly, the cultural relevance of crisis communication strategies emerges from the data analysis through the use of associated hashtags (*Figure 2*) and opinion sharing within tweets (*Figure 3*). The supplementary hashtags enable other culturally relevant associations to be connected to the crisis, keeping the cultural components of the crisis at the forefront of the individual consuming the tweet. Furthermore, the data that includes

clear opinions about the unfolding events demonstrates a cultural response to the ISIL-West crisis by enabling users to openly express cultural and personal views, furthering the reach and relevance of the crisis response strategies.

The significance of cultural factors in crisis communication strategies should not be downplayed (Bell, 2010). The findings of the research support this statement through the identification of cultural influence and its role in the crisis response on Twitter. The following diagram outlines the various roles of culture as identified by Twitter users through the data. Here, the data demonstrates how Twitter users integrate a cultural contribution to the crisis response through tweets.

*Figure 4: Cultural Aspect and Influence*



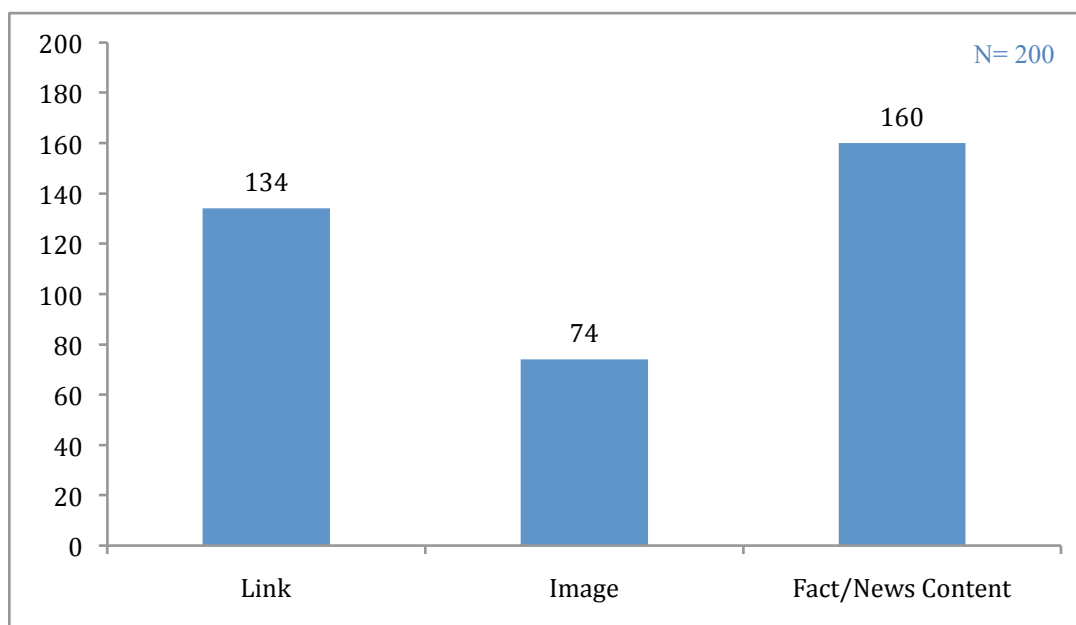
**Cultural Contributions Regarding the ISIL-West crisis on Twitter**

Furthermore, as identified in the literature review, the transition of communication from traditional to modern forms includes the transition of information from linear to dynamic diffusion (Falkheimer, 2014). The research supports this notion through the depiction and application of unique and interwoven communication tactics. The data demonstrates a combination of communication strategies, inclusive of text, image, link, fact, and opinion. Ultimately, this supports the notion of a dynamic information diffusion process through modern communication practices, such as Twitter (Ibid).

The ability of Twitter users to communicate through one platform using various techniques reinforces Falkheimer's (2014) notion of a dynamic diffusion process. The data supports this through the various multi-media techniques that are included in the tweets; 66% (132) of tweets include links and/or images, ultimately supporting the dynamic diffusion process as well as the SMCC model. The model places importance on adapting crisis communication to reflect the most appropriate form and source. In the case of the ISIL-West crisis, the data demonstrates that users are taking to Twitter as a channel to disseminate immediate and unfolding news throughout the crisis; 80% (160) of tweets contained links to news sources, suggesting that users are partaking in crisis communication through active engagement in message dissemination and information sharing, thus, supporting the SMCC model. The breakdown of information sharing content is illustrated in *Figure 5*.

**Figure 5: Information Sharing**

Number of Tweets with “Information-Sharing” Content



Through the analysis into the crisis communication strategies surrounding the ISIL-West crisis on Twitter platforms, the first research question is answered. The question asks, “*what communication patterns and crisis communication strategies arise surrounding the ISIL-West crisis on Twitter? What types of information have been utilized? How?*” The analysis is too broad to identify specific communication patterns, however, specific crisis communication strategies addressed by Bell (2010) do emerge. It is evident from the data that Twitter users apply an audience-focussed, central response with a direct cultural focus. Furthermore, the content analysis recognizes a dynamic diffusion process through modern communication techniques as a result of non-linear information sharing through photos, links, facts and news content, and personal opinion commentary within the data.

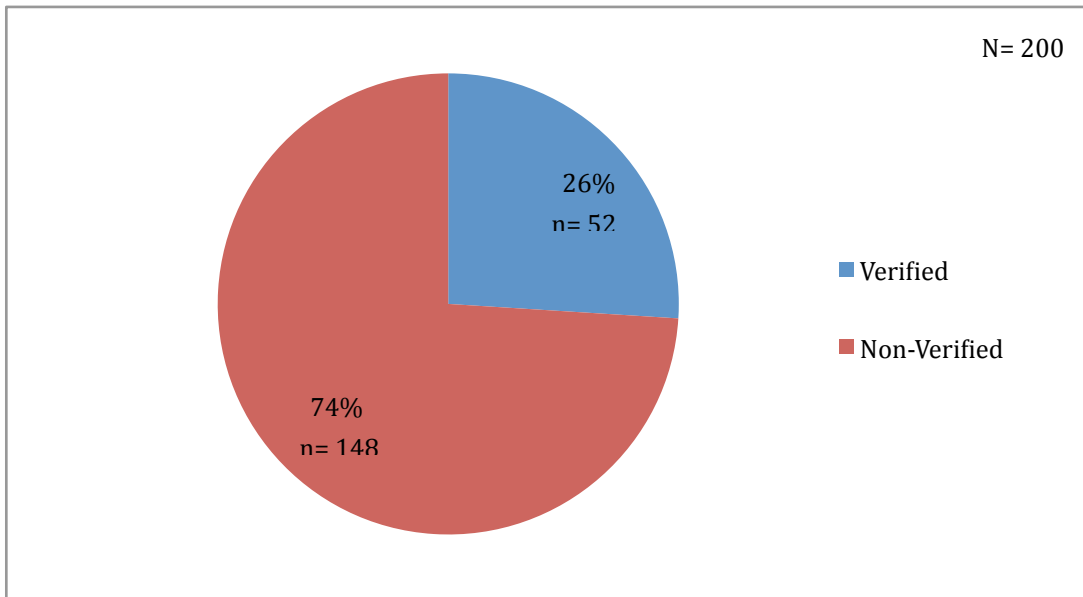
### ***Trustworthiness and Credibility of Social Media Commentary***

The research additionally seeks to understand the apparent trustworthiness and credibility of tweets disseminated through social media during the ISIL-West crisis. The perceived credibility and trustworthiness of social media users plays a significant role in crisis communication for various reasons. The credibility of an online user may influence others to engage online by retweeting, favouriting, and commenting, ultimately leading to increased participation and interaction regarding a crisis (Osatuyi, 2013). Also, the perceived credibility of an online user may increase the apparent validity of content shared online during a crisis due to that individual's position and standing within the online community (Ibid). Ultimately, the believed credibility of social media users plays a pivotal role in the outcome of crisis communication strategies due to the subsequent ability of the individual to positively influence and engage the online community through trustworthy message dissemination (White, 2012).

In order to determine the perceived trustworthiness of the individual responsible for tweeting the data, the analysis compares various factors. The measurement tool to determine perceived trustworthiness and credibility in this analysis is directly related to the number of retweets and favourites combined. This is because when a user retweets or favourites a tweet to their direct followers, they are indicating to their network of followers that they perceive this content to hold accurate and relevant information. First, the 200 tweets are assessed to determine if the publisher of the content was using a Twitter 'verified profile', indicating a celebrity or public figure. Of the 200 tweets analyzed, 26% (52) come from verified profiles. *Figure 6* depicts the statistical breakdown of verified profiles compared to non-verified profiles.

**Figure 6: Profile Status**

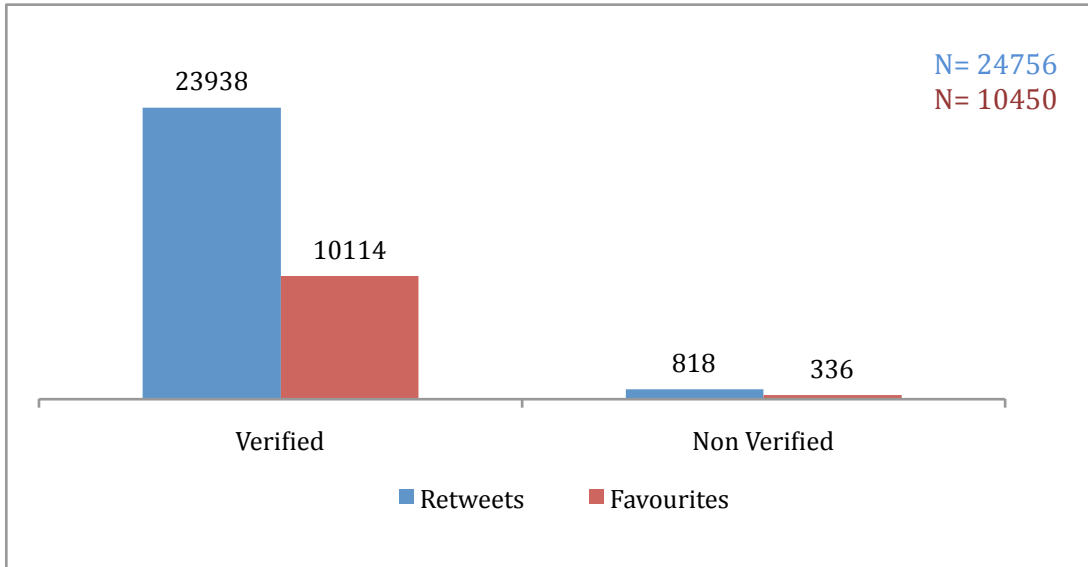
Type of Profile Verification Status



Next, the 52 tweets from verified profiles underwent analysis to determine the total number of favourites and retweets that are received. This is contrasted against the total number of favourites and retweets that are received on non-verified profiles. The graph below depicts this analysis.

**Figure 7: Perceived Credibility of Tweets**

Perceived Credibility of Tweets Determined by Active Engagement Retweeting and Favouriting Original Content



According to the above chart, as identified in this analysis, the findings indicate that there is an overwhelming trust perception towards verified profiles. On the contrary, non-verified profiles have minimal favourites and retweets in comparison to the verified accounts. However, the analysis takes into consideration that verified profiles likely have a significantly wider reach of audience than non-verified profiles, ultimately impacting the representation of statistical data gathered. The table below provides an in-depth statistical analysis of these figures.

**Figure 8: Number of Favourites and Retweets Engaged Across Profile Types**

	Verified Profiles (52)	Non-Verified Profiles (148)	Total (200)
Total	10114 →	336 →	= 10450
Favourites	96.8% →	3.2% →	= 100%
Total	23938 →	818 →	= 24756
Retweets	96.7% →	3.3% →	= 100%
Total	34052 →	1154 →	= 35206
Received	total engagement	total engagement	

Moreover, only 26% (52) of the 200 profiles are verified, yet there is a total of 34052 number of retweets and favourites on verified profiles, indicating perceived trustworthiness. The 34052 total retweets and favourites on verified accounts is contrasted against the 1154 total retweets and favourites on non-verified accounts, totalling 35206 total retweets and favourites among all profile types, indicating that 96.7% (34052) of that number accounted for the verified profiles. Therefore, in terms of perceived credibility, the verified profiles indicate an overwhelming perception of credibility compared to that of the non-verified profiles.

The analysis into the types of profiles that are deemed reputable and trustworthy as a result of the assessment of the favourites and retweets statistics enables a foundational understanding into the perception of social media users. To further this understanding, more analysis is conducted to assess the type of content that reputable sources were disseminating. To do so, the tweets from verified users in the data collection underwent analysis to determine the type of information sharing that is taking place. This

considers the specific content of the data: opinions, links, images, facts and news content. The analysis reveals that 65.5% (131) of the tweets contain no personal commentary or opinion, sharing and dissemination only previously published information to the various online audiences. Another 20% (40) of the tweets share published information and personal commentary with the online network. This leaves only 14.5% (29 tweets) that contain no information sharing tactics, using only personal commentary to disseminate a message regarding the ISIL-West crisis. This indicates that 86% (172 tweets) of the data collected have information sharing tactics within the content, through a combination of opinions, links, images, facts and news content. This supports previous research, which identifies that Twitter users share in accordance with crisis communication strategies to disperse an important message or break in the crisis (Bell, 2010).

Ultimately, the multiple analyses of the data to determine the perceived trustworthiness of the content reveal that Twitter users have a strong perception of trust and validity towards verified profiles. This is assumed to be due to the wider reach of verified profiles as a result of their public persona both online and offline. Additionally, the influence of the verified profiles demonstrates a significant pull on users to engage through retweeting and favouriting, further suggesting a trustworthiness of the source. To further the understanding into the perceived credibility of verified sources, the content of the tweets is assessed to determine what type of crisis communication is disseminated. The analysis suggests that news and statistical facts are most widely disseminated by verified users, ultimately signifying that the sources shared online are accurate and trustworthy content within the Twittersphere pertaining to the unfolding ISIL-West crisis. These findings resolve the second research question, which asks “*how do Twitter users*

*perceive the trustworthiness of social media commentary surrounding the ISIL-West crisis*". This result occurs through the identification that Twitter users find verified users more credible, especially those whom tweet relevant information in the form of links, images, and news facts about the ISIL-West crisis. Furthermore, the perception that a source is credible is more likely to lead others to engage with said source online, as the data reflects. This supports Dufty's perspective on the ability of social media to form "communities of practice" during and after a crisis event (2012: 42).

### ***Technoethical Influence and Ethical Compliance***

The content analysis of the collected data underwent further assessment to determine the role, if any, of technoethics into the content and conduct of Twitter users' crisis response to the ISIL-West crisis. The analysis evaluates the type of content included in the data, ultimately seeking to determine how ethical the commentary and information sharing is. In order to complete this analysis, the data is assessed for associated hashtags included in the publication. The findings demonstrate that there is no outright ethical violation of the content published. This is determined by analyzing two things. First, the data is evaluated to determine the percentage of content that includes associated hashtags outside of the search hashtags (ISIL/ISIS). Second, of the data with supplementary hashtags, an assessment of the ethicality of the content from those tweets is conducted.

The results indicate that 63% (126 tweets) of the data collected had associated hashtags used in the tweet (*Figure 2*). This is significant to the findings because it indicates that the Twitter users' intend to disseminate the tweet to as many consumers as possible through supplementary hashtag look-ups. Furthermore, the importance of this finding also contributes to new understandings about the type of information and

messages communicated as a result of the references and associated meanings of the additional hashtags used. Ultimately, this hashtag analysis provides key information about the types of content that are being tweeted about regarding the ISIL-West crisis. By word-association of the hashtag, users are able to extract the intended meaning of the tweet, intentions, and relative associations to the crisis.

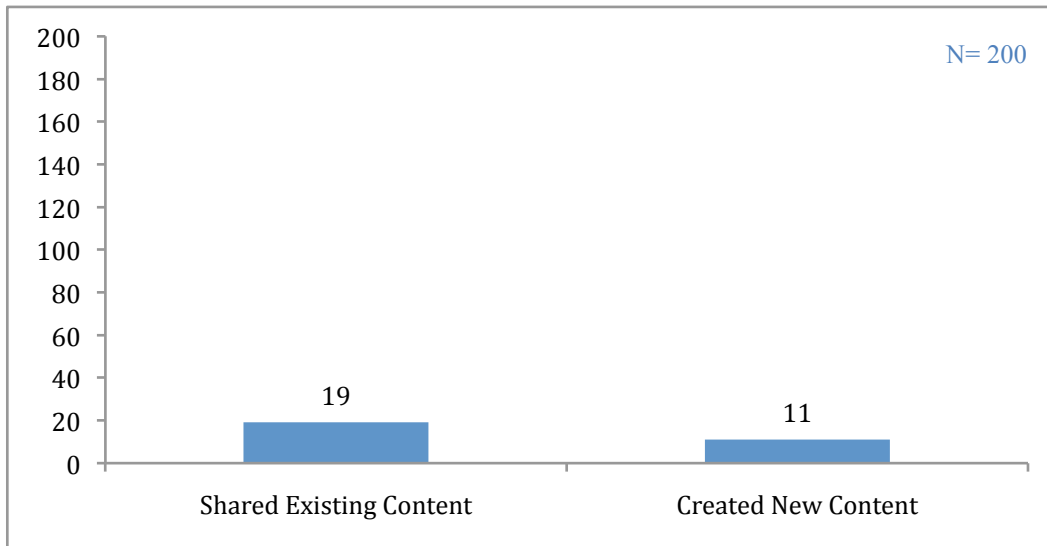
To further support and deepen understanding, the data is assessed according to the additional hashtags to evaluate the ethicality of the content. In this analysis, the hashtags are reviewed for ethically appropriate and non-appropriate hashtags. The findings reveal that none of the tweets with supplementary hashtags contains what is considered unethical content. In assessing the associated hashtags included in the data, it is identified that all of the supplementary hashtags are ethical, consisting of relevant and appropriate singular terms to describe ISIL related information. Some of these hashtags include: Iraq, Levant, US, and Hamas. The criteria that is used to determine if the hashtag content is ethical or unethical is considered by identifying a negative, condescending, immoral, or accusatory tone within the hashtags. Due to the sensitivity and perceptibility of ethical guidelines and conduct through both social media and face-to-face communication, these criteria are developed based on the above guidelines.

Furthermore, supplementary analysis is conducted to support these findings. The primary findings surrounding the ethicality of the content within the data indicate that 85% (170 tweets) of the content assessed is conducted and communicated ethically.

*Figure 9* illustrates the context and production origin of unethical tweets.

**Figure 9: Unethical Tweet Origination Source**

Origin of Unethical Content Disseminated on Twitter



This additional analysis considers the direct content within the data, specifically looking at the wording, links, and images shared on Twitter. Although minimal, only 15% (30 tweets) of the data analyzed reveals findings which identify that there are two main types of unethical data. The first set of unethical data consists of previously-published content that is shared by another user. Within this category, the main findings identify unethical images and headlines condemning behaviours and religious values. The second set of unethical data identified in the analysis is individually created and produced content. This consists of personal and original content communicated by the user and subsequently, the creator of the messages. Within this second category, the primary finding identifies unethical behaviour through the activity of name-calling and condemnation of specific beliefs and values.

In accordance with the theory of technoethics, the findings reveal that the majority of social media users conduct online communication in an ethical manner. According to the theory of technoethics, Eid acknowledges the importance of setting

“standards against which conduct can be measured and evaluated” (2008: 92). With the presence of social media and the Internet within today’s technologically centered society, the availability of online content and content creation is ever-present (Sung & Hwang, 2014). As a result, to comply with the importance of ensuring that ethical guidelines are enforced, users must evaluate the content before disseminating a message to the vast online world. A technoethical analysis coding table assesses the various stakeholder positions in social media crisis communication surrounding the ISIL-West crisis (Appendix A). Ultimately, in identifying the ethical compliance of Twitter users in the data communication strategies, these findings resolve the third research question, which asks “*how do these communication patterns and strategies comply with technoethical guidelines*”? The analysis indicates that social media users are respectful and accommodating towards ethical guidelines through the dissemination of messages that share information about a crisis, while at the same time, respecting the various parties involved and affected by the crisis and its subsequent communication. These findings reflect what Simons discusses surrounding the role of social media in manufacturing crisis communication (2014). He states that there “is a need for influencers not only to communicate, but to manage the communication” (Ibid: 586). In doing so, there is a newfound ability to enhance “perceived competence” (Ibid). By ethically engaging with Twitter to communicate about the crisis, social media users are demonstrating competence and credibility.

***Discussion: Looking Into Communication About ISIL Through A Technoethical Analysis of Social Media***

The findings provide answers to the research questions through the assessment of the data in combination and consideration of the direct theory linked to this study. The first research question seeks to identify potential communication patterns or miscommunication patterns that develop through the tweets collected for analysis. Upon assessing the data, it is observable that the lack of clear strategic communication patterns associated between the tweets in the data set subsequently led to the identification of miscommunication patterns. As per Bell's discussion, communication patterns develop through central communication, an audience-centered reaction, and the importance of culture to crisis response (2010). Consequently, due to the lack of ongoing continuity identified between the tweets, the identification of miscommunication patterns emerges.

The initial research seeks to identify the way communication patterns developed among the data. However, the collection of tweets only looks at individual tweets, rather than a chain of communication including subsequent comments and replies to the originating tweet. Ultimately, this data collection method works against identifying the development of communication patterns. In doing so, the research identifies the identification of miscommunication patterns. This disconnect, or miscommunication, depicts clear characteristics of the Twitter content. The disengagement emerges in the form of indirect communication between users and tweets, and a lack of clear and ongoing conversation surrounding the crisis. Due to this miscommunication and lack of consistency among the data, the miscommunication develops into its own pattern. The development of miscommunication patterns evolve from a lack of continuity and

conversation among the tweets within an audience centred context, cultural content, and universal reach of Twitter as a social media platform. Therefore, the findings clearly align with Bell's identification of communication patterns (Ibid).

The analysis additionally identifies that verified Twitter users are perceived to be more credible than non-verified users. With the observation that verified users are likely to have more followers and exposure than non-verified users, this factor is taken into consideration when evaluating the overwhelming disproportion of favourites and retweets for verified profiles compared to the minimal amount for non-verified profiles. The perceived credibility of tweets and social media users has the ability to significantly influence online crisis communication engagement. However, when applying the perceived credibility findings to the development of communication patterns, in this research, there appears to be no link or connection. This analysis supports the emergence of miscommunication patterns that developed, which may not be influenced by the lack of ongoing conversation and activity with verified tweets, but rather the individual and discontinuous engagement with the data.

Lastly, the analysis considers the technoethical influence on the content, development, dissemination, and engagement with Twitter as a crisis communication platform. The research provides key insights into this theory identifying that a significant number of the tweets used in the data were ethically compliant and appropriate with the type of content shared, and the subsequent engagement with Twitter throughout the crisis communication process. As such, the position of technoethics which takes on the stance that "technology should be moderated by moral and social controls and that the pursuit of such technology related issues requires special consideration and expertise" is upheld by

the findings of this research (Luppicini, 2009b: 2). Chatterjee questions whether problems with ethicality in the Internet-world are a result of human behaviour or technological composition (2007). There is a significant parallel between the theory of technoethics and the resulting conduct of crisis communication through Twitter. Ultimately, the data shows minimal defiance of the theory and guidelines of technoethics. The only rift between the theory and the findings identifies that 15% (30 tweets) of the content disseminated contradicts the theory of technoethics by containing unethical content through the form of condemnation, shaming, immoral words and judgment, ultimately going against moral and ethical guidelines for social conduct set out by society.

## **Conclusion**

This research is an evaluation into the role of social media in crisis communication. As social media's usage and prevalence grows within society, it is important to understand its role in communication strategies as a crisis unfolds (Jordan-Meier, 2011). This research assesses the role of Twitter as a communication platform during the ISIL-West crisis. The analysis applies a technoethical lens to the data to determine the influence of ethical guidelines and considerations within one's Twitter communications. The research considers three significant components regarding communication and the ISIL-West crisis. First, it looks at the communication patterns and crisis communication strategies that have occurred on Twitter during the peak periods of the ISIL-West crisis. Secondly, the research assesses the perceived credibility and trustworthiness of online users by considering the active engagement through favouriting and retweeting, thus signifying credible source and content. Finally, the research applies a technoethical perspective to

the data to determine the role and influence of ethical practices in ISIL-West crisis communication on Twitter.

### ***Most Important Findings***

Three key findings emerge from the research, ultimately identifying answers to the three research questions. First, the analysis identifies that through a lack of clear communication patterns and Twitter continuity within the data set, a miscommunication pattern developed. The inability to identify direct links and patterns between the data led to the insight towards a miscommunication. This emerges as a significant and still relevant pattern within social media crisis communication. Secondly, the data assessment identifies insightful findings into the perceived credibility and trustworthiness of the content surrounding the ISIL-West crisis. The data assesses the engagement and participatory activities of the tweets between verified and non-verified profiles. The findings reveal that there is a strong perception of reliability and credibility among verified users' tweets. Lastly, the research underwent a technoethical analysis (Appendix A) to determine social media users' compliance and ethical conduct through the ISIL-West crisis and its related crisis communication activities online. Overall, the assessment identifies that an overwhelming amount of the data coincides with the technoethical guidelines and expectations for ethical social media communication practices. There are no outliers within the data that drastically defy the theory of technoethics.

### ***Limitations and Implications***

This study is useful in examining the role of Twitter as a communication platform in the facilitation, dissemination, and response of crisis communication during the ISIL-West crisis. The research assesses 200 tweets for the following content, features and factors:

favourites, retweets, hashtags, informative content, visual content, and personal commentary. As a result, the assessment has a deliberate and specific focus, seeking to identify specific strategies and trends in the ISIL-West crisis communication. Due to the strict data collection, some limitations did arise.

The research seeks to identify potential communication patterns surrounding the ISIL-West crisis. However, after beginning to analyze the data, it is learned that due to the limited data collection which contains only direct tweets, the exclusion of replies and responses to the tweets prevents the research from identifying potential patterns. This limitation does not hinder the analysis and results of the research, but it does constrict the findings to specific strategies, rather than patterns associated with the ISIL-West crisis communication. In order to overcome this for future studies, it would be beneficial to include and assess the associated responses and replies to the primary tweets. Further, the research could be enhanced by conducting surveys and interviews with the data contributors to extract a more in-depth understanding into the purpose, motivation, and intent of the published tweets. This will enhance the data by expanding the content, as well as providing a way to identify patterns associated through the responses and replies to the initial content. As a result, the findings will be more conclusive and extensive, identifying communication patterns individually related to the content.

Furthermore, through the evaluation of the data, it is determined that much of the content analysis requires interpretation through individual perceptions. For example, when assessing the data to determine the ethicality of the content, the resulting findings could have varied outcomes depending on the perspective of the researcher due to unique perspectives, assumptions, and a criterion pertaining to what is or is not ethical. This

limitation affects the research by potentially affecting the perception of the data.

Ultimately, this proves to be a limitation due to the enhanced diligence required in assessing the data in order to ensure accurate and appropriate analysis.

The findings of the research identify potential future implications. In accordance with the crisis communication strategies according to Bell (2010) within the literature review, the data recognizes and presents clear crisis communication strategies utilized in Twitter communication surrounding the ISIL-West crisis. Ultimately, this suggests that the potential implications that may result from these findings could include increased knowledge of crisis communication strategies and the ways these strategies unfold. Furthermore, the research develops a foundation into user profiles' credibility and trustworthiness, which may lead to future enhanced understandings of how credibility and trustworthiness is perceived and ultimately relied upon in crisis communication.

### ***Future Research***

This research provides a strong foundational understanding and background into crisis communication strategies employed during the ISIL-West crisis. The research identifies the types of content communicated through Twitter, ultimately identifying potential strategies involved in Twitter users' crisis communication techniques, as well as the perceptions of trustworthiness and credibility among social media users. With this research serving as a basis for understanding and contributing to new knowledge and insights surrounding the role of social media in crisis communication, the foundation is set for future research. Due to the specific data collection and analysis criteria, there are areas of research within this study that are not addressed conclusively. As a result, one clear direction for future research relies on strengthening and expanding the current

knowledge of crisis communication strategies through social media by developing new insights. These insights would arise as a result of expanding the data collection process to include associated replies and commentary stemming from the originating tweet.

Additionally, future research may develop from these foundational findings which should assess the types of individuals communicating. Due to the specific data collection and analysis criteria and guidelines within this research, the exact identity and associated lifestyle of the communicator is not evaluated. However, for future studies, the knowledge could be expanded, leading to stronger findings, by analyzing the individual communicating on Twitter. This could include assessing their location, culture, background, and lifestyle. In turn, this will position the individual user and their associated relation to the crisis, ultimately strengthening the findings due to increased relevance and knowledge of the communicators involved.

As it stands, the research conducted in this study has developed significant and relevant ground work for research to expand upon the knowledge identified here. This research develops a sound foundation upon which to position future research by conducting a content analysis to determine the role of social media in communication, the crisis communication strategies present from the content, and the perceived credibility and trustworthiness of the communicators. From here, future steps should be taken to expand knowledge and understanding into the role of crisis communication through social media platforms.

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## Appendixes

### *Appendix A: Technoethical Analysis Table: Twitter conduct regarding the ISIL-West crisis from the perspective of “the West”*

Luppicini, 2015, University of Ottawa: CMN 5115.

<p>Theoretical Perspectives</p> <ul style="list-style-type: none"><li>- Duty: concerned with the obligations one has to individuals within society. The ISIL-West crisis is an ongoing cultural, political, and religious battle between the Islamic State and the Levant and “the West”. “The West” has the duty to stand up to ISIL and protect the rest of the world from the radicalized views and actions of the group.</li><li>- Rights: Do Twitter users have the right to publicize opinions and facts in the fight against ISIS?</li><li>- Applied: By tweeting about the crisis, individuals may be putting themselves at risk. Do the benefits of communicating about the crisis outweigh the potential risks and backlash associated?</li></ul>
<p>Historical Perspectives</p> <ul style="list-style-type: none"><li>- Twitter is known as a platform for tweeting about social, political, trending, and insignificant content</li><li>- The purpose of tweeting about the crisis is to disseminate breaking and unfolding news about the crisis, as well as publicizing personal opinions</li><li>- Twitter emerged over the past decade as a global social networking site connecting networks and disseminating messages</li></ul>
<p>Political Perspectives</p> <ul style="list-style-type: none"><li>- Twitter requires legislative and governing guidelines when tweeting about controversial, political, and culturally sensitive crises</li><li>- Twitter has a code of conduct to outline appropriate uses of the platform, but how is this monitored and enforced?</li><li>- Twitter use in the ISIL-West crisis may be beneficial to disseminate critical information as the crisis unfolds, but it may be potentially dangerous to express personal opinions on the platform due to the sensitivity of the crisis</li><li>- How does law enforcement and Twitter govern the use and application of Twitter in compliance with ethical obligations?</li></ul>
<p>Socio-Cultural Perspectives</p> <ul style="list-style-type: none"><li>- Social media users engage on Twitter to share information through the form of images, links, facts/ news information, opinions, memes, videos, etc., an action with potential dangerous effects</li><li>- Legislation has to be invoked to protect potential privacy invasions, while also supporting the rights of citizens to use technology with a potential benefit for the greater good</li></ul>
<p>Economic Perspectives</p> <ul style="list-style-type: none"><li>- Technological capabilities of Twitter may be a beneficial tool for societal growth and message sharing to a wider audience</li></ul>

<ul style="list-style-type: none"> <li>- Twitter use in military situations may be destructive to society through effective ISIL recruiting campaigns</li> </ul>
<p>Stakeholders' perspectives (values and interests)</p> <ul style="list-style-type: none"> <li>- Twitter: encourage information sharing in a positive, ethical atmosphere</li> <li>- Twitter users: are at potential risk of danger from publishing personal opinions; however, if effectively sharing news information, crisis communication may benefit society in actively combatting ISIL</li> <li>- ISIL: want to be able to disseminate their message to recruit new militants, raise funds, and silence "the West"</li> </ul>
<p>Levels of influence (i.e., biological, physical, psychological, social, environmental)</p> <ul style="list-style-type: none"> <li>- Twitter is a fairly recent and exploratory technology with the potential to benefit society</li> <li>- Twitter may be a useful tool in a crisis to disseminate information to a wide audience in real-time</li> <li>- Twitter use during a sensitive crisis may have negative effects</li> </ul>
<p>Intended ends and possible side effects</p> <ul style="list-style-type: none"> <li>- Intended end of Twitter use during the ISIL-West crisis is to take down the enemy by sharing messages, news, information and facts</li> <li>- Side effects include: <ul style="list-style-type: none"> <li>o Negative backlash</li> <li>o Targeting innocent users as a result of something posted</li> <li>o Bullying, harassment, retaliation, clash of opinions</li> </ul> </li> </ul>
<p>Compare means and intended ends</p> <ul style="list-style-type: none"> <li>- Intended ends are to disseminate news and information surrounding the unfolding ISIL-West crisis with active engagement online through favourites, retweets, and positive commentary</li> <li>- The means are to publish information on Twitter profiles to wider networks</li> </ul>
<p>Overall assessment in terms of efficiency and fairness</p> <ul style="list-style-type: none"> <li>- Twitter provides a wide-reaching platform to disseminate messages in an instant</li> <li>- There is potential danger to innocent users who may receive backlash for posting sensitive content due to the volatility of this crisis</li> <li>- How do we, as Twitter users, ensure ethical conduct is being enforced on Twitter?</li> </ul>