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Differential Reinforcement in the Online Radicalization of Western Muslim Women Converts

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Abstract

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by

Heather Ann Cone

MSIR, Troy University, 2007

BA, Colorado State University, 2000

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

The emerging phenomenon of Western women Islamic converts learning radicalized ideology through social media constitutes a challenge to cyber policy makers hampered by a lack of gender-nuanced radicalization research. The purpose of this exploratory qualitative case study was to develop a greater understanding of how the differential reinforcement tenet of social learning theory may help to explain the conversion and radicalization of Western women towards a fundamentalist Islamic ideology through their participation in the social media. Key research questions explored how participation in online social media may create vulnerability towards radicalization and exploitation. The blogs of 3 different Western women converts were selected from the social media website Tumblr for the period of January 2014 through September 2015. Approximately 21,700 posted entries were subjected to a deductive coding process and thematic analysis. Key findings indicated that fervent activism, strong commitment to the digital community, and a tepid response to world terrorist attacks were potential vulnerabilities for targeted radicalization. Additionally, authors increased the number of their ideology-related posts in response to increased reader interactions. Finally, reader responses did not appear to alter the bloggers' static and strongly held positions on cultural gender roles. The positive social change implications stemming from this study include a starting point for the development of a formal adolescent cyber educational program, new metadata delimiters for the identification and engagement of vulnerable women, and as an example of the use of public policy theoretical frameworks for homeland security research.

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Dedication

This is dedicated to my sons. You are growing up in a vastly different world, one that is marked by growing digital societies and physical fractures of violence. I want to make the world a safer place for you but I realize that may be beyond my abilities. Therefore, I want to better equip you and other children like you with the knowledge and intellectual tools to deal with this tumultuous, interconnected, messy, yet ultimately beautiful reality. I hope that this research will help do that. I love you each so very much.

Acknowledgments

No major accomplishment is ever achieved on one's own, and I gratefully acknowledge those who were instrumental in finishing this study. Dad, you encouraged me to never stop learning and I wish you were here to see this. Mom, you have been my constant support system, no matter how far away we are sometimes. Thank you for being my late night sounding board, for being an amazing babysitter when deadlines were looming, for being willing to fly anywhere in the world if we needed you for a few days, and for reminding me every day that I could indeed do this. Thank you to my husband, Kyle, who has been there for me through every late night, for calmly fixing my computer calamities, celebrating my successes, and helping me pick myself back up when it was hard. I also want to acknowledge my boys, who have grown up to this point thinking a laptop and a stack of research material is normal accouterment for every family outing. You two have been mature beyond your years with your patience and I love you so much.

I also want to thankfully acknowledge my dissertation committee. Dr. Bethe Hagens, you are one of the most insightful and inspiring people I have ever had the privilege to work with. Dr. Bruce Lindsay, your expertise and guidance with the subject matter has been crucial and I appreciate it more than I can say. Thank you also to my university reviewer, Dr. Kristie Rogers, for your wisdom and support in ensuring the quality of this study.

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Chapter 1: Introduction to the Study

In 2009, a Pennsylvania woman with no previous ties to Islamic fundamentalist organizations created an online radicalized Islamic identity and actively plotted to kill a Swedish cartoonist (Halverson & Way, 2012). In the spring of 2014, two British teenage girls were detained as they attempted to travel to Syria and marry radicalized jihadists they had met online; Interpol is still searching for the two Austrian teenagers that followed the same course of action (Baker, 2014; Dettmer, 2014). In July 2014, a 19-year-old American nurse was arrested as she tried to travel to Syria, also having been radicalized online and attempting to join her jihadist handler (Baker, 2014; Dettmer, 2014). Bird of Jannah, Umm Layth, Khadijah Dare, Umm Ubaydah, and Umm Haritha are examples of online pseudonyms adopted by several young women believed to be from Western nations who have left their homes, married active jihad members of the extremist organization Islamic State of Iraq and Greater Syria (ISIS), and now openly recruit and give advice on joining ISIS over social media platforms such as blogs, Twitter, Tumblr, and Kik (Baker, 2014; Dettmer, 2014; Zavadski, 2014). These women all share a crucial common factor: the use of social media as a vehicle for radicalization in a fundamentalist Islamic ideology.

The Internet has revolutionized learning, transcending distance and time to create a virtual space where one's social network is vastly expanded and constantly in flux (Bhui & Ibrahim, 2013; Kitchin, Linehard, O'Callaghan, & Lawton, 2013). Social media in particular has created a paradoxical illusion of intimacy and anonymity, where individuals can inconspicuously explore potentially nonconformist ideologies while

making virtual affiliations that seem as real as physical relationships. It is this dynamic that makes social media an ideal radicalizing tool for technology savvy fundamentalist terrorist organizations such as ISIS and Al-Qaeda, particularly for populations that do not fit the expected recruit profile and may therefore be difficult to contact, such as young Western women (Bhui & Ibrahim, 2013; Farwell, 2011; Pujazon-Zazik & Park, 2010). The excessively patriarchal, authoritarian nature of fundamentalist Islamic organizations is at ideological odds with secularized Western culture, making the trend of recruitment of initially non-Muslim women living in developed, non-Muslim "Western" states (the United States, Canada, and Western Europe, for example) a quandary that is in desperate need of research (Halverson & Way, 2012; Saltman & Smith, 2015; Von Knop, 2007).

This study explored the social learning aspects involved in the online Islamic conversion and radicalization of women from Western states through the social media format of blogs, focusing particularly on the potential impact of differential reinforcement in the online format. Within the virtual community of social media, learning takes place just as it does within one's physical social environment, yet researchers still understand little about the role of online differential reinforcement in that learning process or its impact on digital-based radicalization (Brauer & Tittle, 2012; Pauwels & Schils, 2014; Tittle, Antonaccio, & Botchkovar, 2012). The potential social change implications for this study were a better and more gender-nuanced understanding of the social learning mechanisms at work in the online radicalization of young Western women. Knowledge of these dynamics is crucial for counter-terrorism policy experts and

nonprofit organizations intent on curbing the growing phenomenon of young Western women converting to an extreme Islamic fundamentalist ideology.

This chapter frames the study and provides clear boundaries on what was and was not included. A brief background of the topic provides context for this study. Next, I present the overall problem statement, followed by the purpose statement and research questions. Following is a discussion of social learning as the theoretical framework and Islamic feminism providing cultural context. A brief presentation of study's nature then introduces the case study methodology, with further elaboration provided in Chapter 3. I present a few key definitions and discuss the assumptions, limitations, scope, and delimitations that define the boundaries of this study. Finally, the significance of this study is presented, establishing its potential contributions to the discipline, public policy, and positive social change.

Background

There has been very little research into the phenomenon of the conversion and radicalization of young Western women to an extremist interpretation of Islamic ideology through the vehicle of social media. Primarily physical environments, physical social connections, and the interplay between individual identity crises and group dynamics have dominated radicalization research (see Guadagno, Lankford, Muscanell, Okdie & McCallum, 2010; Hughbank & Ferrandino, 2012; Olechowicz & Matusitz, 2013; Omelicheva, 2010; Silber & Bhatt, 2007; Venhaus, 2010). As the most recent New York Police Department Intelligence Assessment available among open sources noted (Silber & Bhatt, 2007), radicalization generally happens in a four-stage process that begins with

the individual being exposed to extremist ideology and then progressing through the steps of consciously seeking further indoctrination; committing to the extremist ideology and eschewing moderating influences; and, finally, planning an act of jihadist violence. Certain environments can act as accelerants to radicalization by increasing the exposure to extremist ideology and minimizing moderating influences (see Hughbank & Ferrnadino, 2012; Loza, 2010; Mousseau, 2011; Piazza, 2012; Silber & Bhatt, 2007). The Internet is one of these environments, providing a medium through which extremist propaganda can be spread constantly and globally (e.g., Alexander, 2010; Faria & Arce, 2012; Guadagno et al., 2010).

Social media has become a significant feature of the growing digital community, creating relationships among users that can be just as influential as physical connections (Holt, Bossler, & May, 2012; Holt, Burruss, & Bossler, 2010; Miller & Morris, 2014; Pauwels & Schills, 2014; Yun & Eunyoung, 2014). These virtual relationships create digital communities based on the commonality of shared beliefs versus the coincidence of physical location (Eckert & Chadha, 2013; Etling, Kelly, Faris, & Palfrey, 2010; Kitchin et al., 2013; Nisa, 2013; Pujazon-Zazik & Park, 2010). This ability of social media to link anyone with an Internet connection has made it an ideal tool for radicalization. The vast range of information available on the Internet has imbued it with an implied, and sometimes unearned, authority, particularly in subjects such as religion (Aly, 2013; Campbell, 2012; Rothenberg, 2011). Fundamentalist Islamic organizations such as ISIS have been exploiting this inferred authority to establish credibility for their ideology, then using social media to identify and target potential recruits to woo with that ideology

(Alexander, 2010; Halverson & Way, 2012; Keene, 2011; Mastors & Siers, 2013; Meir Amit Intelligence and Terrorism Information Center, 2014; Theohary, 2011; Thompson, 2011). Observers can see this dynamic in action with the social media exploits of women such as Bird of Jannah, Umm Layth, Khadijah Dare, Umm Ubaydah, and Umm Haritha as they have encouraged other women to follow their lead, provided practical advice on joining a jihadist terrorist group, and built moral electronic support for violence (Baker, 2014; Dettmer, 2014; Saltman & Smith, 2015; Zavadski, 2014).

Women such as Colleen LaRose, Bird of Jannah, Umm Layth, Khadijah Dare, Umm Ubaydah, and Umm Haritha present an apparent conundrum. Islamic ideology identifies very specific gender roles, and ultraconservative interpretations extenuate those roles, making the recruitment of women for radicalization and potential jihadist action appear contradictory (Chishti, 2012; Clycq, 2012; Criteli & Willet, 2012; Halverson & Way, 2012; Meir Amit Intelligence and Terrorism Information Center, 2014; Saltman & Smith, 2015; Von Knop, 2007). Research into this seeming inconsistency is in its infancy and is just beginning to identify the developing dynamic.

Research into this phenomenon has been further stymied by a lack of gender-nuanced cultural perspective (Saltman & Smith, 2015; Sjoberg, 2009). In the past, Western feminists have typified Muslim women as perpetual victims (Llewellyn & Trzebiatowska, 2013; Malik, 2010; Saltman & Smith, 2015). This view does not take into account the complexities of Islamic gender roles and has led to a rise in Islamic feminism that aims to imbue research about Islamic topics with the cultural perspective of both

secular and religious context (Llewellyn & Trzebiatowska, 2013; Malik, 2010; Salem, 2013).

Despite the comprehensive research on radicalization and the recognition of the importance of the Internet to fundamentalist Islamic organizations, there has been almost no scholarly research on the dynamic between social media, radicalization, and how some Western women Islamic converts may become vulnerable to exploitation. This study specifically aimed to address that gap in knowledge by exploring this emerging environment and the unique insights it brings to the targeted Islamic fundamentalist radicalization process of Western women in their late teens and early 20s.

The increasing Internet savvy of fundamentalist Islamic terrorist organizations has underscored the timeliness and importance of this study (Alexander, 2010; Halverson & Way, 2012; Meir Amit Intelligence and Terrorism Information Center, 2014). ISIS in particular has developed a marketing plan that includes a heavy reliance on the Internet in general and specifically focuses on social media to target potential recruits among Western states (Meir Amit Intelligence and Terrorism Information Center, 2014; Saltman & Smith, 2015). This strategy is working, as current United States and Israel state intelligence agencies have gauged Western jihadist recruits among ISIS troops at around 3,000 individuals and growing rapidly (Meir Amit Intelligence and Terrorism Information Center, 2014). Understanding the way organizations such as ISIS have been exploiting social media is crucial to developing counterradicalization cyber policies.

Problem Statement

Current research on fundamentalist Islamic radicalization has been heavily influenced by the patriarchal authoritarian nature of fundamentalist Islamic organizations, resulting in counterradicalization and counterterrorism policies that are primarily male centric (Makin & Hoard, 2014; Sjoberg, 2009; Saltman & Smith, 2015; Von Knop 2007). Research on vulnerabilities, conscious targeting, and self-recruitment to a radicalized Islamic ideology has focused almost exclusively on the male perspective, disregarding any recognition that cultural gender norms may impact the learned radicalization process for Muslim women (e.g., Alexander, 2010; Egerton, 2010; Hughbank & Ferrandino, 2012; Omelicheva, 2010; Özeren, Sever, Yilmaz, & Sözer, 2014; Silber & Bhatt, 2007; Venhaus, 2010). This gender-blind focus has created a gap in the understanding of how the phenomenon of some Western women converting to an ultraconservative and extreme Islamic ideology is developing.

The Internet has created a new sphere of opportunity for radicalization. Available around the clock to anyone with access to the relatively inexpensive technology equipment, the World Wide Web allows for the global distribution of a vast quantity of information with little regulation to verify the content (Aly, 2012; Bhui & Ibrahim, 2013; Campbell, 2012; Keene, 2011). Social media use has exploded in the last decade, creating digital social communities banded by ideas instead of proximity (Bhui & Ibrahim, 2013; Kitchin, Linehand, O'Callaghan, & Lawton, 2013). Social media has become an important tool for radicalizing agents to gain access to an infinitely expanded audience of potential targets, but little is understood about the dynamics of the social learning process

in regard to those strategies (e.g., Alexander, 2010; Halverson & Way, 2012; Mastors & Siers, 2014; Pradhan, 2011; Keene, 2011; Thompson, 2011). A better understanding of the dynamic between social media and socially learned radicalization is crucial to the development of gender nuanced anticyberterrorism policies optimized for the digital environment (Khan, H., 2014; Saltman & Smith, 2015).

Even a cursory search of the Internet produces a plethora of social media sites where Muslim women are participating in a global discourse on religion, gender roles, and a wide spectrum of sociopolitical beliefs. Participants in this discourse are opening up their own introspections for mass consumption while simultaneously exposing their own vulnerabilities for radicalizing agents looking for targets. Exploring the dynamics of the learned radicalization of Western women over social media through the gender and culturally sensitized lens of Islamic feminism will provide insight into how digital differential reinforcement may be creating exploitation opportunities, providing a foundation for more effective, gender-targeted cyber counterradicalization policies.

Purpose

The purpose of this qualitative case study was to develop a greater understanding of how the differential reinforcement tenet of social learning theory (Akers, 1998; Bandura, 1977) may be affecting the conversion and radicalization of Western women towards a fundamentalist Islamic ideology through their participation in the social media platform of blogs on the website Tumblr.

Research Questions

The central research question for this study was as follows: In what ways could an online blog about Islamic self-realization written by a Western female convert create a potential vulnerability for exploitation by a fundamentalist Islamic organization?

The subquestions for this study were as follows:

1. How is differential reinforcement in the form of readers' interactions with the blogs appearing to influence the topic and tone of the case authors' blog entries?
2. How does the reader and case author dynamic of blog participation influence the case author's interpretation of Islamic cultural gender behaviors?

Theoretical Framework and Conceptual Framework

The theoretical framework of this study was social learning theory (Akers, 1998; Bandura, 1977). According to social learning theory, individuals learn by emulating observed behavior; positive consequences will encourage repetition of the behavior while negative consequences will discourage repetition (Akers, 1998; Bandura, 1977; McLeod, 2011). Under the tenets of social learning theory as postulated by Bandura (1977), there are four specific ways individuals learn behaviors: imitation, or mimicry, of a behavior; differential reinforcement, or the rewards and punishments an individual receives for his or her behavior; the definitions, such as "good" or "bad," that the participating group assigns to the behaviors; and differential association in which the individual is regularly interacting with a social group that accepts and encourages the behavior. Akers (1998) expanded social learning theory to include the learning of nonconformist behaviors, the

validity of which has been explored in a large body research that I analyze in Chapter 2. This study focused on the impact of differential reinforcement in the unique environment of the Internet to evaluate the key concepts of this study, such as the vulnerability of the bloggers to exploitation and potential susceptibility to radicalization.

The conceptual framework for this study was a variant form of feminist theory I used to provide cultural context. Scholars have often used feminist theory for research on gender issues including oppression, inequality, and domestic violence because it provides the perspective of the marginalized and affected women (Trier-Bieniek, 2015). The ideology of Islam is paternalistic in nature and has strongly defined gender roles that include the subordination of women (Saifee, Baloach, Sultan, & Khalid, 2012). A feminist theory context provided the opportunity to move beyond Islamic gender stereotypes and explore the experiences of the converted case authors blogging about their personalized ideological beliefs (Sjoberg, 2009; Trier-Bieniek, 2015).

However, traditional feminist theory is based on a secular, Westernized understanding of feminism, making it a poor fit for research on Muslim women and the impacts of their religious ideology (Bahi, 2011, p. 150). Therefore, for this study I used the variant Islamic feminism, which embraces the role of religion within the lives of Muslim women, to establish the appropriate cultural context for the data analysis (Bahi, 2011, p. 150). Islamic feminist theory has been gaining acceptance among Muslim women because of its ability to combine the feminist perspective and social activism without divorcing the influencing religious ideology (Bahi, 2011, pp. 144-147). As the development of this concept in Chapter 2 will demonstrate, the application of Islamic

feminism as the conceptual framework for this study provided a feminist perspective of gender inequality, oppression, and subjugation within the culturally appropriate religious context, and it allowed for the emergence of a more complete understanding of how the participants may be learning new behaviors from an ideologically based online community.

This study combined an ideological categorization created by Rand researchers with a selection of Islamic revivalism ideology literature from 2007 to 2015 to develop a spectrum of contemporary Islamic ideological permutations (Rabasa et al., 2004). Balancing developments of the Islamic revivalism movement and the potential impacts of American foreign policy from the last 15 years, this typology provided a comprehensive perspective of Islamic feminist ideology as the case authors are experiencing it today. This spectrum was used to orient the ideological beliefs of the study's sampled blogs and commenters, ensuring that the sampled cases met the intent of studying a wide spectrum of Islamic feminism, from extreme fundamentalism to conservatism. In this way, I used Islamic feminism to provide ideological orientation and cultural context for this study.

Nature of the Study

The objective of this qualitative instrumental case study was to explore the evolution of ideological beliefs and the effects of differential reinforcement on the beliefs espoused by a small sample of young adult Western women bloggers between the age of 18 and 29 who have converted to an Islamic ideology. Such inquiry led to a better understanding of how these bloggers might be vulnerable to digital exploitation by ideological extremists. The emergent nature of this topic was best explored by the

qualitative methodology, which offered a great deal of structural flexibility (Creswell, 2009, p. 4; Maxwell, 2013, pp. 30-31). Qualitative research is also inclusive, allowing the researcher to collect data from unorthodox sources if appropriate, such as the blogs this study accessed (Maxwell, 2013, p. 87).

The exploratory instrumental case study approach best fit the parameters of this research: the contemporary nature of this societal phenomenon; the inability of the researcher to influence or control the behavior of the participants; and the focus on exploring a specific phenomenon (Yin, 2014, pp. 4 -5, 9). Another benefit of the case study approach for this research was that it allowed the examination of the data within the context of their actual environment, providing crucial social context (Yin, 2014, p. 16). The case study approach allowed for the targeted phenomenon to be treated as a distinct entity, acknowledging that variables are complexly interconnected (Yin, 2014, p. 17). Finally, the case study approach allowed me to maintain a realist perspective, observing the data as they were instead of focusing on what could be manipulated, an important factor considering the contemporary nature of this phenomenon and lack of existing research (Yin, 2014, p. 17).

As this study aimed to understand differential reinforcement and ideological evolution in the online environment, I collected data exclusively from three online blogs published on the social media website Tumblr between 2014 and 2015 so as to establish the appropriate digital context and socioenvironmental perspective targeted by this study. Three blogs, each written by a different woman between the ages of 18 and 29, all of whom lived in Western nations and had converted to Islam, were selected for this case

study. These blogs were chosen based on criteria that included the length of time blog had been active, the frequency of blog postings, the number of participating commenters, access to an archive of past posts, and evidence of a shift in the case author's personal ideology over time towards a more fundamentalist interpretation of Islam. The original proposal for this study was to create mind maps for each month of these blogs to document each case author's expressed ideological beliefs as well as evidence of differential reinforcement. However, as explained in Chapter 4, I amended this plan because column graphs proved to be a more useful way to document and visualize ideological belief shifts and differential reinforcement. Purposeful sampling was used to identify blogs that provided a wealth of information over at least 1 year's time, ensuring sufficiently detailed data were collected for analysis. A significant benefit of using online blogs for data collection was that it was possible to access blog entries for the entire lifespan of the blog through its archive.

Definitions

There are several concepts in this study that may have alternate or potentially controversial definitions, requiring the establishment of common operational definitions. *Radicalization* is a key concept for this study and is defined as the process of adopting an extremist ideology that includes receptivity to the idea that violence is a solution to sociopolitical concerns (Alexander, 2010; Hamm, 2008; Omelicheva, 2010; Silber & Bhatt, 2007). Unless otherwise noted, the term radicalization within this study was limited to fundamentalist Islamic radicalization.

Deviant behavior also requires definition so as to remove any stigma or bias. For the purposes of this study, deviant behavior is nonconformist behavior that does not match the sociocultural norms of the individual's society (Monagan, n.d.). It does not convey any value judgment, either positive or negative (Monagan, n.d.).

The term *revert* appears in this study to denote those who have converted to Islam instead of being born into the religion. This term symbolizes the core Islamic ideological belief that all people are originally born Muslim even if they are then raised in a different faith; when an individual converts to Islam, they are therefore "reverting" back to the religion of their birth (Huda, 2016). Because the term revert was favored by the cases sampled in this study, it is included in the definitions for clarification and is used interchangeably with the word *convert* throughout the study.

The choice to use the nomenclature *ISIS* necessitates a brief discussion because this acronym is currently in flux. As of 2016, there has been no collective global or even national consensus over which acronym is appropriate to use for the fundamentalist Islamic terrorist group that has established a caliphate by force in parts of Iraq and Syria. Several acronyms have evolved for this group, including ISIS, IS, and Isil (Fitzgerald, 2014; Meir Amit Intelligence and Terrorism Information Center, 2014; Yuhasin, 2014). Within the last 2 years, the acronym *Daesh* has also begun to be used as it represents a literal manifestation of the Arabic translation of this group's name; significantly, only the French government has officially adopted this most recent nomenclature shift (Black, 2014; Khan, Z., 2014). There have been some indications from a few United States military leaders and the Secretary of Defense that the term Daesh may be gaining some

adherents, but official United States military and government policy has remained unchanged in the use of an earlier nomenclature shift to Isil (Fitzgerald, 2014; Yuhasin, 2014).

In this study, I have used the term ISIS for two reasons. First, and most importantly, the terrorist group itself vehemently opposes the acronym Daesh because it does not include the word Islamic, which is central to their self-expressed identity, and because the translation could be interpreted as an insult (Khan, Z., 2014). As Vanostaeyen (2014) pointed out, Daesh is almost exclusively being used by government leaders who have a political desire to deny any perception of legitimacy to a supposed "Islamic State." This political maneuvering does not provide an academically legitimate reason for adopting the Daesh nomenclature over one of the names the actual group and its supporters most embrace. Second, the acronym ISIS has been still widely used by itself or as a part of a combined acronym (ISIS/IS) in recent academic studies, recent open-source intelligence reports, public discourse, and the media. By using the word ISIS, the vast majority of readers will immediately know which group I am referencing; using Daesh or another less popular acronym for this group may cause unnecessary confusion. Therefore, this study included the commonly understood acronym ISIS to refer to the terrorist group sometimes alternately known by other acronyms, including IS, Isil, and Daesh.

Assumptions and Limitations

This study rests on the assumption that the sampled blogs were a truthful representation of the participants' mindsets, beliefs, gender, age, and nationality. The data

that I sampled were collected from open-source online blogs; the authors of these blogs posted their beliefs in a public forum that can be accessed by anyone with Internet access. Nonetheless, due to the nature of this study, no direct contact with the case authors or their blogs was initiated, thereby avoiding any potential security or exploitation concerns. Therefore, I was unable to question the case authors further about the accuracy of their profile information or words. Because blogs are intended for public introspection and discourse, I adopted the assumption that the blog entries and profile persona accurately reflected the identity of the blogger and described personal experiences, opinions, and ideas (Bhui & Ibrahim, 2013; Dean & Newman, 2012; Gleason, 2013; Leonardi, Huysman, & Steinfield, 2013). This assumption is also a limitation of the study as there was no way to verify that the case authors did indeed portray their own thoughts and opinions. To help assuage this limitation and increase the study's dependability, any self-contradictions among a case author's blog entries were noted in the data analysis phase.

A second limitation of this study was my potential bias as a non-Muslim Westerner living in a country that is currently engaged in military operations against fundamentalist Islamic terrorist organizations. Mitigation of this limitation was two-fold. First, I have attempted to educate myself about classical Islam by reading large sections of the Qur'an and Sunnah. Second, the data analysis focused on identifying a shift in ideological orientation of the bloggers, evidence of social learning, and emergent themes without placing any observational value judgments. This study was about the dynamics of differential reinforcement within the bloggers' learned radicalization process and not about judging the bloggers' beliefs.

Scope and Delimitations

The scope of this study was the differential reinforcement element of social learning theory as it applies to the process of fundamentalist Islamic radicalization of female Western converts through the medium of social media. I selected social learning theory as the theoretical framework for this study because the individuals experiencing this phenomenon demonstrate a conversion to an ideology that they often have no physical exposure to beyond the Internet (Baker, 2014; Dettmer, 2014; Zavadski, 2014). A wide range of research has also demonstrated the applicability of social learning theory to the Internet (e.g., Holt et al., 2012; Holt et al., 2010; Miller & Morris, 2014; Pauwels & Schils, 2014; Yun & Eunyoung, 2014). The tenet of differential reinforcement was chosen because it appears to be uniquely suited to social media, where approval of a behavior can be measured by the number of interactions, such as "likes," a posted status receives. Differential reinforcement was also singled out because it has rarely been studied in isolation from the other elements of social learning theory, making it difficult to gauge its impact (Brauer & Tittle, 2012; Pauwels & Schils, 2014).

This study was limited to the social media platform of Tumblr. Tumblr is a hybrid between the intensely personal blog format and the more interactive formats of sites such as Facebook and Myspace. The personal blog format was not chosen because most lack an element of differential reinforcement; unless an individual comments, there is no way for a reader to indicate approval or disapproval. Facebook and Myspace offered integral elements of differential reinforcement but were too peripheral, aimed at capturing moments of a person's day versus introspection. Twitter was considered, but the site's

140-character limit keeps contributions too brief to analyze in sufficient depth. Tumblr provides bloggers both a platform that encourages personal introspection with integrated differential reinforcement elements such as “likes,” “notes,” and ways to “share” with others. The multiple elements of the Tumblr social media site allowed this research to potentially have transferability for other instances of women learning nonconformist behavior through social media.

Significance

The federal public administration recognition of the Internet as a distinct realm in need of targeted policies is illustrated by Executive Order 13636 that directs the development of specific cyber policies to protect the cyber infrastructure and those who use it (Obama, 2013). Countering the extremist messages found online requires the development of policies that utilize the same digital elements that have made radicalization so successful (Saltman & Smith, 2015; Venhaus, 2010). According to the director of the think tank Muflehun, the first step in combating radicalization within social media requires understanding what makes radicalization over this platform unique (Khan, H., 2014). Therefore, this study explored the unique environment of Tumblr, addressing the knowledge gap from the theoretical perspective of social learning theory with a focus on the differential reinforcement aspect. This study is also unique in that it used an Islamic feminist epistemological lens to examine a virtual community discourse, thereby challenging the traditional male-centric approach of current Islamic terrorism research.

The results of this study may provide insights into potential cyber counterradicalization policy options aimed at targeting at-risk women. Similar to government antidrug efforts, anticyberterrorism efforts will require a combination of policies that provide education while actively mitigating current perpetrators (Saltman & Smith, 2015; Venhaus, 2010); this study provides key data for both antiradicalization educational and engagement policies.

Additionally, the results of this study may help to build a theoretical foundation for research into homeland security public policy. Currently, research on homeland security is theoretically and conceptually fractured due to its application across a myriad of fields that include criminal justice, international relations, and public administration (Klitz & Ramsay, 2012). This study aimed to provide a successful example of the application of a public policy theoretical framework to a homeland security topic, resulting in policy vectors that can be further developed and implemented.

Summary

Online radicalization of Western women through social media for fundamentalist Islamic groups such as ISIS is both actively developing and poorly understood (Khan, H., 2014). Radicalized converts such as Umm Ubaydah have been using social media to encourage other women to follow a similar extremist path, yet researchers still understand little about why this learning process is proving successful (Baker, 2014; Dettmer, 2014; Zavadski, 2014). This research explored this dynamic, focusing on the social learning element of differential reinforcement, by analyzing the ideological evolution of Tumblr blogs by Western women who had converted to Islam and were

demonstrating radicalized ideology in their postings. A positive social change implication of this study is that it may provide a foundation for the future development of female gender-oriented cyber counterradicalization policies.

In Chapter 2, a summary and analysis of the research literature pertinent to this study is presented. First, I discuss the literature search strategy. Then, the existing literature in five related areas is examined. This includes an overview of both social learning theory as the theoretical foundation and Islamic feminism as the conceptual framework. Other academic research areas reviewed include radicalization research, social media research, and female gender roles within Islam.

Chapter 2: Literature Review

This qualitative case study makes a foundational contribution to the scholarly understanding of how Western, initially non-Muslim women may be learning radicalized Islamic fundamentalist ideologies through the social media platform of Tumblr blog participation. This chapter will connect the problem statement, theoretical framework, and research questions presented in Chapter 1 with knowledge gaps identified in the literature. It begins with a description of the literature search strategy followed by a review and analysis of social learning theory as an appropriate theoretical framework and an examination of Islamic feminism as the conceptual framework. Considerations of open-source literature on radicalization, social media, and women's gender role and identity within Islam conclude the chapter.

Literature Search Strategy

Because little research exists on the topic of online radicalization of Muslim women, I developed the search strategy for this literature review to provide a degree of flexibility in theme development. Using a two-phase process, I began the literature search with broad categories and then narrowed them as I identified specific themes. The first phase entailed a subject-based search of multiple databases, including Political Science Complete, SAGE's Political Science Collection, International Security and Counter Terrorism Reference Center, the Military and Government Collection, Homeland Security Digital Library, Academic Search Complete, ProQuest Central, and PsychInfo. Delimiters restricted the search to peer-reviewed articles published after January 1, 2008 this kept the research as current as possible while still providing access to older articles

that were germane to the study. Any articles that predated 2010 were carefully examined to ensure that they offered specific insights that could not be obtained in a more recent study. Searches within the Homeland Security Digital Library were given extra scrutiny in the initial selection phase due to system limits that made it impossible to set delimiters. Search terms included combinations of terms such as *social learning theory*, *radicalization*, *terrorist organization recruiting process*, *social media*, *Islamic feminism*, *Islamic sisterhood*, *Islam discourse*, *Islamic female gender roles*, and *Islam gender identity*.

The second phase of the literature review was a more organic process that traced the origins of sources found in the first phase. This included seminal work on social learning theory by Bandura (1977) and its evolution for nonconformist behavior by Akers (1998); religious foundational texts were also identified and analyzed. Perusing the bibliographies of articles led me to pertinent studies that could be obtained through Google Scholar. Finally, I combined research article bibliographies and Google Scholar "cited" notations to identify government agency reports that could provide some broader scope and research perspective, such as Silber and Bhatt's (2007) radicalization report for the New York Police Department. The second phase ended when source saturation had been reached and no further insight from new sources was found.

It should be noted that the research for this study was limited to open-source documents, accessible to the general public. The nature of this study would suggest a high likelihood that relevant classified analyses and reports exist. I did not seek out these sources because I intended this research to be unclassified, and the inclusion of any

classified information would render the entire document classified, thereby limiting its potential dissemination. An unclassified status best fits the aim of building a theoretical foundation for homeland security within the field of public policy and makes this study easily accessible for policy makers at all levels.

Overall, the literature search for this research study started broad and then narrowed to the specific themes that emerged. A systematic search of the Walden library databases provided a strong foundation that was then augmented by cross-referencing bibliographies and government reports. The expansive nature of this search process has ensured that I reviewed and analyzed an exhaustive cross section of relevant, peer-reviewed research.

Theoretical Foundation: Social Learning Theory

Social learning theory is a foundational sociological theory, evolved from Sutherland's 1947 differential association theory, that posits individuals learn social behavior from their social environment (Akers, 1998; Atchison & Heide, 2011; Bandura, 1977; McLeod, 2011). The social environment consists of the familial and peer networks that an individual interacts with over his or her life; these networks model specific behaviors that are then reinforced through positive and negative social consequences (Bandura, 1977). Over time, an individual repeats those behaviors that have proven to be effective within his or her social environment while discontinuing behaviors that are unrewarded or actively discouraged through a punishment (Akers, 1998; Bandura, 1977). Empirical testing of social learning theory has demonstrated its wide applicability as an explanation for learning both conforming and nonconforming behavior, particularly

among adolescents and young adults (Akers, 1998; Bandura, 1977; Atchison & Heide, 2011; Brauer & Tittle, 2012; Gunter, 2008; Miller et al., 2011; Pratt et al., 2010; Tittle et al., 2012; Zhuhadar, Yang, & Lytras, 2013). While social learning theory is most often associated with criminology, its tenets have been demonstrated to be empirically viable across a multitude of sociological research areas (Akers, 1998; Brauer & Tittle, 2012; Miller et al., 2011; Zhuhadar et al, 2013).

Social learning theory is appropriate for this study because of the potential impact of digitally learned radicalization on cyber public policy and administration. The Internet is a crucial tool for terrorist organizations to gain access to a wide audience and to grow new recruits on a global level (Alexander, 2010; Meir Amit Intelligence and Terrorism Information Center, 2014). Countering the online impact of Internet-savvy organizations such as ISIS requires the creation and implementation of polices that will identify and neutralize their strategies (Khan, H., 2014). The first step in this process is understanding how radicalization is being learned through a medium that has no physical element.

Social learning theory postulates that there are four distinct ways individuals learn from their social environment: differential association, differential reinforcement, imitation, and definitions (Akers, 1998; Bandura, 1977). Differential association is in-group learning, where an individual learns the behaviors of his or her social network (Akers, 1998). Differential association learning is influenced by the frequency of interaction, the collective duration of those interactions, the primacy of those interactions in the individual's life, and the importance of the relationship to the individual (Akers, 1998). Teachers, family members, and important friendships therefore usually have a

greater influence on an individual's social learning than acquaintances or unknown community members.

Differential reinforcement is learning through consequences: performing a certain behavior results in either a positive or negative consequence and therefore encourages or discourages the repetition of that behavior (Akers, 1998; Bandura, 1977). The proximity of the consequence to the behavior, the perceived reliability of receiving the consequence, and the importance of the consequence to the individual all have an impact on the influence of differential reinforcement; in general, rewards are more persuasive than punishments (Akers, 1998; Bandura, 1977; Gunter, 2008; Tittle et al., 2012). Differential reinforcements are multidimensional and can incorporate a variety of physical, social, and emotional rewards and punishments (Akers, 1998).

Imitation is the learning of observed behaviors through mimicry in an attempt to garner the same results as the role model; it is most potent for new behaviors and is less influential once the behavior has been learned (Akers, 1998; Bandura, 1977). Children learning to talk learn by imitating just as new religious converts learn the accepted behaviors during worship by observing and repeating the actions of others.

Definition learning involves the adoption of social network specific attitudes and values, such as what constitutes "good" or "bad" behaviors (Akers, 1998). Gender roles and racial beliefs are examples of definitional social learning.

The four tenets of social learning theory are best conceptualized as a puzzle in which each part contributes to the overall process. A schoolyard bully provides an excellent example of how these tenets support each other. The nuclear family is often the

earliest, longest lasting, most frequent, and most important relationship to a child; behavior observed in the home then has a great deal of potent differential association. A male child who witnesses his father hit his mother at home then learns the definition that physical violence is an acceptable solution for problems and that males have dominance over females. This child then imitates the behavior with playmates and receives reinforcements of emotional and physical superiority over others. This learning process is very generalizable; multiple research studies have demonstrated that the basic tenets of social learning theory are applicable in both Western and non-Western cultures (Atchison & Heide, 2011; Freiburger & Crane, 2008; Kim, Akers, & Yun, 2013; Miller & Morris, 2014; Shechory & Laufer, 2011; Tittle et al., 2012; Yun & Eunyoung, 2014).

While social learning has been commonly portrayed as an unconscious process, there is a growing body of research that has indicated that it can be more deliberative in nature, especially for nonconforming or deviant behaviors (Atchison & Heide, 2011; Bates, 2014; Frieburger & Crane, 2008; Kanra, 2012; Pauwels & Schils, 2014; Shechory & Laufer, 2011). For example, there has been a great deal of debate on the tenet of differential association and whether individuals are influenced by their peers to act in a nonconforming manner or if nonconforming individuals actively seek out peers with similar viewpoints (Kanra, 2012; Miller & Morris, 2014; Pauwels & Schils, 2014; Shechory & Laufer, 2011). Kanra (2012) in particular argued that individuals could consciously accomplish social learning through the purposeful learning of an attitude or belief, such as religion or a cultural belief. The idea of conscious social learning has potential applicability for online radicalization.

Even though social learning theory was developed in a pre-Internet age, the media's potential role as catalyst was recognized almost immediately. Bandura (1977) argued that television personalities were especially effective at spurring modeling even without any differential association or tangible differential reinforcement. During the early infancy of the Internet age, Akers (1998) prophetically predicted that increased access to media formats would increase the scope and range of differential association as near constant access redefine frequency and duration of contact. Recent research has supported this prediction as the Internet has led to the creation of a virtual peer network that can be as influential as a physical peer network (Freiburger & Crane, 2008; Gunter, 2008; Hinduja & Ingram, 2009; Holt et al., 2012; Holt et al., 2010; Miller & Morris, 2014; Miller et al., 2011; Pauwels & Schils, 2014; Yun & Eunyoung, 2014). The nature of the Internet has even mitigated some of the effects of gender and race on social learning, creating virtual peer networks bounded by ideas and imagery instead of face-to-face interactions or bodily appearance (Holt et al., 2010; Miller & Morris, 2014; Pauwels & Schils, 2014; Tittle et al., 2012).

Both Akers (1998) and Bandura (1977) identified differential reinforcement as the crux of social learning theory; if there are no positive or negative consequences of any type attached to a behavior, people are unlikely to adopt that behavior regardless of their peer network, definitions, or behavior modeling. Despite the importance of differential reinforcement to social learning theory, it has primarily been empirically tested in conjunction with at least one of the three other tenets of the theory (Brauer & Tittle, 2012). The researchers who attempted to isolate differential reinforcement found a great

deal of empirical variance on its significance to the learning process, especially in an online environment where threat of a viable punishment is abstract at best and rewards are overwhelmingly psychological (Brauer & Tittle, 2012; Gunter, 2008; Pauwels & Schils, 2014; Pratt et al., 2010; Tittle et al, 2012).

By using social learning theory, this study was grounded in a well-established, empirically sound theory that has high generalizability and has empirical support for its applicability in the online environment. This study also addressed a gap in the literature by isolating and exploring the tenet of differential reinforcement through social media, thereby expanding the knowledge of the theory's applicability on modern media platforms.

Conceptual Framework: Islamic Feminism

As feminism has developed in the West (commonly defined as Western Europe and the United States), its objectives have primarily focused on gender equality issues, oppression, and domestic abuse (Creswell, 2013; Trier-Bieniek, 2015). Modern Western feminism has been strictly secular in nature, eschewing religion as an enabler of gender inequality (Afshar, 2008; Bahi, 2011; de Groot, 2010; Llewellyn & Trzebiatowska, 2013; Malik, 2010; Salem, 2013; Zimmerman, 2014). Under the tenets of Western feminism, religion is just another arena from which gender inequality and oppression must be abolished. Non-Western religious practices such as female circumcision and restrictive clothing are isolated from other cultural factors and used as examples by secular feminists of the purportedly inherent unfeminist nature of religion in general; Western feminism, then, takes on the role of liberator (Llewellyn & Trzebiatowska, 2013; Malik,

2010). Unfortunately, this intolerance fails to take into consideration the importance that religion has for many cultures and societies, causing Salem (2013) to charge Western feminism as being overly simplistic in its understanding of the complexities of culture.

Islamic feminism has developed in direct response to the Western, secular form of feminism as a way to balance being both a practicing Muslim and a socio-politically aware woman within a paternalistic culture (Blore, 2010; Chamas, 2009; Deeb, 2009; de Groot, 2010; Halverson & Way, 2011; Llewellyn & Trzebiatowska, 2013; Malik, 2010, Salem, 2013; Zimmerman, 2014). Islamic feminism is a variation on traditional feminism in that it blends the socio-political efforts of traditional, third wave Western feminism with the religious tenets and ideology of Islam (Blore, 2010; Chamas, 2009; de Groot, 2010; Jad, 2011; Khamis, 2010; Llewellyn & Trzebiatowska, 2013; Malik, 2010; Salem, 2013, Seedat, 2013b; Trier-Bieniek, 2015). Islamic feminism puts gender based socio-political activity in an Islamic cultural context, where religion is the foundation of society, culture, family, and personal lives.

Islamic feminism is more nuanced and variable than it may initially appear and has a varying degree of impact. For example, Islamic feminism for socio-politically active women in Kuwait has meant accepting a culturally appropriate submissive role within political organizations even as those organizations worked for women's voting rights and workplace equality (Al-Mughni, 2010). Iranian Islamic feminism has struggled to maintain its message of gender equality even as it has developed some of its own particular characteristics due to the religious and political climate of that state (de Groot, 2010). Women adherents to Hamas and Hezbollah have embraced the tenets of Islamic

feminism and are attracting highly educated Muslim women with their message of balancing piety with equality (Deeb, 2009; Jad, 2011). On the other end of the socio-political activity spectrum, some adherents use Islamic feminism solely on a local societal and personal level. In West African Qur'an-based girls' schools, for example, Islamic feminism is taught as a method for making life choices, such as careers (Edwin, 2011). Sudanese women utilize a version of Islamic feminism by appealing to the Qur'an as ideological support for their efforts to renegotiate gender position in the patriarchal Sudan society (TΦnnessen, 2010). Overall, the adaptability of Islamic feminism to any Islamic society has led to a growing support for it among Muslim women looking for a socio-political alternative to Western, secular feminism.

A common element to Islamic feminist constructs is the discussion, placement, and acceptance of women within a specific gender role. Examinations and analyses of the Qur'an highlighted multiple passages that assign Muslim women to a specific role in Islamic society that revolves around the family and home life (Chishti, 2012; Malik, 2010; McLarney, 2010; Saifee et al., 2012). The subordinate and home-centric role of women in many modern Islamic societies has been supported by Qur'anic researchers who cite verses from the religious texts on the rights and protections of women (Saifee et al., 2012). Qur'anic researchers such as Saifee et al. (2012) argue that assigned gender roles do not impede gender equality but instead, give each gender a sphere of control. The supremacy of men within Islamic culture is portrayed not only as deity directed but also as necessary for societal harmony (Chishti, 2012; Saifee et al., 2012). On the other hand, some Qur'an researchers contend that the interpretations of gender roles within the

Qur'an are a distortion of its original intent, perpetuated strictly to oppress women (King, 2009; Malik, 2010). Revisionist Qur'anic researchers such as King (2009) and Malik (2010) insist that the Qur'an itself may provide gender equality but that the interpretations of the Qur'an and the accompanying hadiths (religious sayings that direct behavior) have been corrupted over the centuries with the intention of subjugating and oppressing women. Gender roles and the Qur'an will be discussed in further detail in a subsection of this chapter dedicated to the topic of female gender roles and identity within Islam.

Islamic feminism is not without its critics. The variance in the definitions of Islamic feminism has led to charges that it is too disorganized to be usable in the attainment of socio-political goals (Mir-Hosseini, 2011). Moghissi (2011) argued that Islamic feminism is unrealistic because it has idealized Islam and does not face the realities of modern Islamic society (p. 77). There are also some questions about whether or not Islam and feminism can ever be successfully blended as the proscribed gender inequalities inherent to modern Islamic society are the antithesis of feminism (Barlas, 2013; Eyadat, 2013; Seedat, 2013a; Moghissi, 2011).

Perhaps the most damaging criticism of Islamic feminism, though, is the charge that it perpetuates gender inequality even as it purports to end it. Moghissi (2011) argued that by cloaking itself in a religious mantle, Islamic feminism has rendered itself untouchable to criticism, thereby locking its adherents into a single interpretation of what a Muslim woman "should" be even as they struggle against cultural inequalities. It has also been argued that Muslim women are unintentionally reinforcing paternalistic

patterns when they use an Islamic feminist ideological basis to negotiate increased equality as it legitimizes men having the power to grant rights (TΦnnessen, 2010).

Despite these criticisms, Islamic feminism remains the best way to provide an appropriate cultural context for gender issues involving Muslim women (Al-Mughni, 2010; Bahi, 2011; Chamas, 2009; King, 2009; Kirmani & Philips, 2011; Malik, 2010; Seedat, 2013b; Zimmerman, 2014). Gender issues such as oppression and discrimination are heavily influenced by cultural context, and Islam is a driving force on the culture of its adherents. Divorcing feminism from religion in Islamic cultures diminishes them both by negating the effect of each (Bahi, 2011; Barlas, 2013; Chamas, 2009). Therefore, this study used Islamic feminism as a conceptual framework to provide cultural context so that gender issues were better understood.

Radicalization

To remain viable over time, terrorist organizations rely on a steady influx of ideologically indoctrinated recruits for both operational and sustainment actions; this requires supporting the process of radicalization so as to continually identify and groom potential new recruits (Alexander, 2010; Hughbank & Ferrandino, 2012; Faria & Arce, 2012; Silke, 2008; Tezcür, 2010; Venhaus, 2010). Understanding the motivations and processes of radicalization is therefore critical to understanding terrorist organization recruitment and developing appropriate counterterrorism policies.

While an effective and widely accepted definition of terrorism continues to be elusive, radicalization has been much easier to characterize, perhaps in part because it does not have the same political ambiguity or visceral impact as the word terrorism

(Nacos, 2012). Radicalization is the process of accepting and internalizing an extremist ideology that includes the acceptance of violence as a potential solution for perceived political, religious, ethnic, and social issues (Alexander, 2010; Hamm, 2008; Omelicheva, 2010; Silber & Bhatt, 2007). Radicalization is an internal evolution of beliefs that results in an individual voluntarily limiting his or her exposure to conflicting ideas and committing to a specific and extreme religious, political, and social interpretation with the fervor of an absolutist.

Similar to attempts to profile terrorists, there is little commonality in the profile of a radicalized convert, making it difficult to define factors that could preidentify individuals most at risk for radicalization (Hughbank & Ferrandino, 2012; Özeren et al., 2014; Silke, 2008; Venhaus, 2010). Radicalized individuals come from a variety of social and economic backgrounds, have a wide variety of education levels, hail from almost any nation state, represent a variety of ethnic groups, can be either gender, and are overwhelmingly not suffering from any identifiable mental illness or other psychological condition (Alexander 2010; Kavanagh, 2010; Özeren et al., 2013; Piazza, 2012; Silke, 2008; Venhaus, 2010). Despite this variance, the literature clearly indicates a majority of radicalized individuals were searching for some sort of identity as they coped with societal and personal level issues such as ethnic discrimination, religious persecution, marginalization, alienation, and personal dissatisfaction (Alexander, 2010; Egerton, 2010; Hamm, 2008; Hughbank & Ferrandino, 2012; Maslim & Bjorck, 2009; Menkhaus, 2009; Olechowicz & Matusitz, 2013; Omelicheva, 2010; Özeren et al., 2013; Speckhard, 2008; Silber & Bhatt, 2007; Silke, 2008; Venhaus, 2010; Wells & Horowitz, 2007).

The radicalization process is a complex and fluid dynamic that requires both individual and group level actions. The vast majority of radicalized individuals began the process on their own initiative by conducting Internet searches, seeking out groups with extremist leanings, and joining social and religious institutions that proselytize extremism (Alexander, 2010; Silber & Bhatt, 2007; Venhaus, 2010). Once the individual has made the first step into radicalization, group dynamics quickly take over. As the individual starts to associate with like-minded others, he or she gains a great deal of psychological benefit from conforming to the group identity and accomplishing actions that support the group's ideology (Gonzalez, Freilich, & Chermak, 2014; Guadagno, Lankford, Muscanell, Okdie, & McCallum, 2010; Hughbank & Ferrandino, 2012; Kohlmann, 2008; Mousseau, 2011; Olechowicz & Matusitz, 2013; Omelicheva, 2010; Özeren et al., 2013; Rosendorgg & Sandler, 2010; Silber &Bhatt, 2007; Silke, 2008; Venhaus, 2010). Gonzalez et al. (2014) found that women were particularly susceptible to the power of group dynamics due to their perceived importance of social relationships.

While radicalization can happen in support of an infinite number of causes or beliefs, this research study is focused on Islamic radicalization. Islamic radicalization can be conceptualized as a four-step process (Silber & Bhatt, 2007). In the preradicalization phase, individuals have not yet begun to actively seek out extremist ideology but are at risk through exposure to extremist ideas in person, through their community, and over media platforms (Silber & Bhatt, 2007, pp. 22-23). In the self-identification phase, the individual begins to explore extremist ideology on their own initiative through activities such as perusing extremist Internet sites, seeking out extremist discussion groups, and

attending Salfi mosques (Silber & Bhatt, 2007, pp. 30-31). In the third phase of indoctrination, the individual assimilates to the extremist ideology and begins to withdraw from any source of potential ideological moderation, for example, by eschewing mosque attendance and withdrawing from nonextremist friends and family (Silber & Bhatt, 2007, pp. 36-37). Finally, phase four is jihadization, in which the individual accepts violence as an acceptable method of communication and begins actively planning and carrying out attacks (Silber & Bhatt, 2007, pp. 43-46).

Within the broad framework of phases, the radicalization process can exhibit considerable variation. First, progression through the process is not linear; it may start, stop, reverse, or speed ahead at any point (Silber & Bhatt, 2007). Second, while the first three phases may take several years to progress through, progression to the fourth step may be very quick and proceed without any warning indicators (Silber & Bhatt, 2007). Finally, entering this process does not indicate eventual completion of the process; many individuals will never progress to the fourth step of jihadization (Silber & Bhatt, 2007). Participating in Islamic fundamentalist terrorism requires radicalization but radicalization does not necessarily guarantee eventual participation in terrorism.

While Islamic radicalization may begin with the individual, there are certain locations that act as "radicalization incubators," increasing the likelihood of exposure to extremist ideologies (Silber & Bhatt, 2007, p. 20). These locations range from social businesses to education institutions to religious establishments (Alexander, 2010; Silber & Bhatt, 2007). Three such incubators require special mention: diasporas, incarceration facilities, and the Internet.

Ethnic diasporas are ethnic communities living outside their home nation that have not fully assimilated to their current nation state society. Diasporas can feed the growth of Islamic radicalization by providing extended exposure to Islamic extremist ideology stemming from political dissatisfaction, cultural alienation, and perceptions of ethnic persecution (Hughbank & Ferrandino, 2012; Menkhaus, 2009; Mousseau, 2011; Omelicheva, 2010; Özeren et al., 2013; Piazza, 2012; Silber & Bhatt, 2007). For example, extremism has flourished in Somali diasporas in the United States, where "radically angry" youths are at risk for radicalization and recruitment by the Islamic terrorist organization Al-Shabaab and its message of xenophobia and jihad (Menkhaus, 2009). Uzbek and Tajik communities in several Central Asian countries, such as Kyrgzstan and Kazakhstan, have retreated into radical "Islamicization" and militancy as an answer to government persecution (Omelicheva, 2010). Through secondary learned trauma, radicalization has become multi-generational in Kurdish diasporas in Turkey, creating a large pool of indoctrinated recruits for the Kurdistan Workers' Party (PKK)/Kurdistan Communities Union (KCK) (Özeren et al., 2013).

Similar to the societal insulating effect of the diasporas, Western prisons have also become breeding grounds for Islamic radicalization (Hamm, 2008; Loza, 2010; Silber & Bhatt, 2007). Prisoners tend to be disaffected and are physically isolated from the moderating ideological variety of general Western society, making them particularly susceptible to a single, galvanizing message by a charismatic leader (Hamm, 2008; Loza, 2010; Silber & Bhatt, 2007). While religious conversion is common in Western prisons, prison Islamic conversions are disproportionately extremist in nature (Hamm, 2008;

Loza, 2010). Islamic radicalized prisoners then take those extremist beliefs with them upon release back into society, extending the reach of the original message (Loza, 2010).

Finally, the Internet has become a force multiplier for radicalization, providing extremist propaganda global reach, constant access to an audience, and few limiting regulations (Alexander, 2010; Faria & Arce, 2012; Guadagno et al., 2010; Kohlmann, 2008; Silber & Bhatt, 2007; Venhaus, 2010). The Internet has allowed terrorist organizations to develop their own *brand* that includes a consistent message and an implied legitimacy (Alexander, 2010; Silber & Bhatt, 2007; Venhaus, 2010). The pervasiveness of the Internet has made it exceedingly easy for individuals exploring extremism to find a plethora of radicalized ideology on a variety of virtual platforms that include dedicated websites, chat rooms, blogs, forums, and social media (Alexander, 2010; Guadagno et al., 2010; Silber & Bhatt, 2007; Venhaus, 2010). The Internet has allowed the influencing power of group dynamics to escape physical boundaries, creating virtual communities of like minded individuals that are just as persuasive as physical groups (Alexander, 2010; Guadagno et al., 2010).

Overall, the research on radicalization is fairly comprehensive with two glaring omissions: social media and women. Despite the undeniable power of the Internet in general and social media in particular on the radicalization process, the open-source scholarly sources on radicalization over different forms of social media are extremely limited. For example, as of 2016, Silber & Bhatt's (2007) government sponsored identification of the Islamic radicalization process had not been updated to reflect the quantum leaps in social media, leaving it a singular, albeit dated, resource.

The majority of research on radicalization also ignores gender differences, using the young adult male as the focus; if radicalized women are mentioned at all, they are treated as an anomaly (for examples, see Alexander, 2010; Silber & Bhatt, 2007; Venhaus, 2010). This exclusion is a grave one. Makin and Hoard (2014) found that Western women are just as likely to support and participate in fundamentalist, right leaning organizations as the more liberal, left leaning organizations, despite the tendency of fundamentalist terrorist organizations to practice pronounced gender discrimination. As radicalization is a prerequisite for joining or actively supporting a terrorist organization, research on gender-nuanced radicalization over social media is desperately needed.

Social Media

The development of the Internet and its near global adoption represents a significant revolution in communication with an impact tantamount to the invention of the printing press. The Internet has forever altered formerly static concepts such as location and time with its ability to link individuals in real time communication regardless of the distance between them. The Internet has redefined the notion of community through the development of a virtual society that forms around ideas and beliefs instead of physical proximity (Bhui & Ibrahim, 2013; Kitchin et al., 2013). A crucial element of this virtual society is social media.

Social media, also known as web 2.0, are websites dedicated to interaction between users; by design these websites are explicitly intended to elicit discourse between case authors and readers (Bhui & Ibrahim, 2013; Dean & Newman, 2012;

Gleason, 2013; Kitchin et al., 2013; Leonardi et al., 2013). Social media has driven an evolution in mass communication from a single directional message to a multi-directional dialogue (Bates & Mooney, 2014). It developed in tandem with the technology that has made it possible, with the first discussion forum debuting in 1978, only 7 years after the first email was sent (Curtis, 2013). Social media takes many forms, including Facebook, Twitter, MySpace, Instagram, YouTube, Pinterest, LinkedIn, Google+, Snapchat, discussion boards, question and answer forums, comment sections, and blogs. The interactive and dynamic nature of social media can be very persuasive, creating a perceived psychological link between users even if no physical relationship exists (Bhui & Ibrahim, 2013; Farwell, 2011; Kitchin et al., 2013). Approximately a quarter of the world's population interact with some form of social media; Facebook alone boasts over a billion users and YouTube has over 500 million users (Curtis, 2013). Adolescents and young adults have particularly high participation rates with social media, making it an important social element in their lives (Pujazon-Zazik & Park, 2010).

Social media has several inherent benefits and risks. Social media link individuals based on commonalities instead of geography (Pujazon-Zazik & Park, 2010; Thompson, 2011). This allows marginalized and nonconforming individuals to connect to others with similar characteristics, facilitating the development of a virtual support network (Eckert & Chadha, 2013; Nisa, 2013; Pujazon-Zazik & Park, 2010; Thompson, 2011). Ultraconservative Cadari women in Indonesia use social media to connect with other adherents, providing both religious and social support for their alternative lifestyle; disenfranchised Muslims in Germany connect and interact with each other in a virtual

community that is free from the prejudices of the physical world (Eckert & Chadha, 2013; Nisa, 2013). Social media opportunities provide individuals struggling with identity issues the psychological comfort that they are not alone.

Another benefit of social media is the psychological freedom it can provide, becoming the diary of Millennials and Generation Z, where feelings, thoughts, and beliefs can be expressed and explored outside the bounds of societal and cultural norms (Campbell & Kelly, 2009; Chiluwa & Adegoke, 2013; Thompson, 2011). For example, through the platform of blogs, Iraqi adolescent girls have the opportunity to muse and explore identity tribulations and gender beliefs in the chaos of post-war life (Nisa, 2009). YouTube provided a global stage for Muslim women worldwide eager to counter the anti-Islam film *Fitna* with their own interpretations of Islam (Vis, van Zoonen, & Mihelj, 2011). Social media has created access into users' inner thoughts and provided a platform for those thoughts to be shared, discussed, and expanded. Even as social media brings like-minded individuals together, they also provide exposure to new ideas, beliefs, and lifestyles, thereby encouraging tolerance (Pujazon-Zazik & Park, 2010).

Despite these benefits, there are some significant risks associated with the use of social media. Cyber bullying is an increasing concern, as the perceived anonymity of the Internet emboldens some to be cruel (Pujazon-Zazik & Park, 2010). The very psychological openness that s encourages also creates targets for users who may be seeking perceived weakness (Halverson & Way, 2012; Hasinoff, 2014; Freiburger & Crane, 2008; Pradhan, 2011; Thompson, 2011). Through its persuasive and addictive juxtaposition of visual and auditory stimuli, social media also seem to encourage the

imitation of risk behaviors (Farwell, 2011; Freiburger & Crane, 2008; Moreno, Parks, Zimmerman, Brito, & Christakis, 2009; Pujazon-Zazik & Park, 2010; Welbers & de Nooy, 2014). Finally, social media presents the risk of misrepresentation. Once posted, words, images, and audio cannot be fully deleted, making any post susceptible to being copied, changed, and manipulated to convey meanings unintended by the original author; these manipulations can have far-reaching consequences for the author's personal and professional life (Cheong & Lundry, 2012; Newsom & Lengel, 2012; Pujazon-Zazik & Park, 2010).

Social media has proven to be highly adaptable to a plethora of different uses, but there are three areas that are particularly significant to this research: social movements, Islamic religious forums, and radicalization/terrorism. Social media has demonstrated a remarkable ability to spur social movements. Social media provides information, aid coordination of action, and allow virtual participation (Chiluwa & Adegoke, 2013; Ems, 2014; Gleason, 2013; Kumar, 2014; Soriano & Sreekumar, 2012). Particularly for populations that do not have cultural, societal, or gender equality, social media has evolved into tools of resistance that give a voice to those that may not otherwise have one (Cheong & Lundry, 2012; Chiluwa, 2012; Echchaibi, 2013; Ems, 2014; Etling et al., 2010; Kumar, 2014; Siapera, 2014; Simon, 2011; Soriano & Sreekumar, 2012). In this way, social media has become a major element of a variety of protests and movements, swelling the number of interested participants and gaining a potentially limitless audience.

Another significant feature of the Internet is the near instantaneous access to information on any topic, allowing it to augment and even replace recognized authority figures such as priests and teachers (Aly, 2012; Campbell, 2012; Rothenberg, 2011). Social media forums on Islam may provide an exponential increase of access to religious discussion, but they are also facilitating mutations from more traditional interpretations (Aly, 2012; Campbell, 2012; Mousseau, 2011; Salamandra, 2012; Waltrop, 2013). For example, the topic of mythical *jinn*, or spirits in the Islamic faith, has recently gained increased attention in social media discourse despite its marginalized nature, causing changes to mainstream religious practices (Rothenberg, 2011). *Jinn* folklore is unlikely to cause cataclysmic shifts in modern Islamic practice. More radical dialogue, such as a jihad online group peddling the belief of a global Muslim victimization, takes advantage of the perceived authority of the Internet with much more significant consequences (Andre, 2014; Campbell, 2012; Mousseau, 2011). The radicalization that is seeping into online Islamic social media sites is leading to some Imams adopting extremist ideology in an attempt to compete with the radicalized religious messages that can be found within social media sites (Mosseqau, 2011). The inherent structure of social media creates these opportunities and makes them especially difficult to counteract.

Social media provides an inexpensive, convenient, and efficient method of communicating with a diverse global audience; these very attributes, though, make it such an effective tool for radicalization, recruitment, fund raising, propaganda, training, and coordination for Islamic fundamentalist terrorist groups such as Al Qaeda and al-Shabaab (Alexander, 2010; Freiburger & Crane, 2008; Halverson & Way, 2012; Keene,

2011; Mastors & Siers, 2014; Theohary, 2011; Thompson, 2011; Pradhan, 2011). As previously discussed, social media often provides insight into the innermost thoughts of users, making it relatively easy to identify and target disenfranchised, disaffected youths that may be vulnerable to promises of camaraderie, psychological approval, and adventure (Alexander, 2010; Freiburger & Crane, 2008; Halverson & Way, 2012; Thompson, 2011). Social media has become an unexpected "enabler" of radicalization and terrorism by providing access to the target recruit demographic and by providing a platform to keep extremist groupthink and ideology well stoked (Keene, 2011).

Fundamentalist Islamic terrorist organizations such as ISIS have embraced the global outreach possibilities of social media. Social media has become a vital propaganda element, spreading both positive and negative imagery that incites an emotionally charged response in the targeted demographic (Saltman & Smith, 2015). Notably, government anti-cyber radicalization and terrorism programs in the United States and Great Britain have not similarly harnessed the power of social media, leaving this environment free for exploitation by a single extreme message (Dalgaard-Neilsen, 2008; Saltman & Smith; Venhaus, 2010).

The potential power of social media in radicalization cannot be overstated. Social media has become the "frontline for engagement" against radicalization (Saltman & Smith, 2015). Radicalizing agents are able to harness both the positive and negative attributes of social media, their potent ability to incite dedication to social movements, and their usurpation of religious authority to create the perfect mix for identifying and

indoctrinating a continuous stream of recruits. This process is also extremely difficult to counteract because it is imbedded in the very structure and nature of social media.

Female Gender Roles and Identity in Islam

Female gender roles and identity in Islam are established by the sources that form the foundation of Islam as both a religion and as a culture: the Qur'an and the Sunnah. A common refutation to the perception of Islam as an oppressively patriarchal ideology is the contention that it was the first major world religion to codify protective legal rights for women within its foundational texts (Abd-Allah, 2008; Afshar, 2008; Baker, 2009; Chishti, 2012; Halverson & Way, 2012; King, 2009; Saifee et al., 2012). Inheritance rights for Muslim women are protected to a certain extent, especially when there is a lack of a male heir (Qur'an, 4:12, 4:176; Sunnah, Book 23). Punishments for societal crimes, such as theft and adultery, are harsh but generally gender-blind (Qur'an, 5:38; Sunnah, Book 20). Divorce is allowed by either sex and men are directed to treat divorced women "kindly" to include financial provisions (Qur'an, 2:231 & 4:15; Sunnah, Book 9). Both the Qur'an and the Sunnah stress that men and women are capable of reaching Paradise and should act in a righteous, moral, and holy manner that pleases Allah.

Despite these egalitarian elements, the Qur'an and Sunnah are not as gender equal as scholars such as Chishti (2012) and Saifee et al. (2012) have argued. For example, both the Qur'an and Sunnah allow the withholding of financial support from divorced women and the confiscation of inheritance assets if the woman has been "indecent," a vague term that is left undefined and is not applied to men (Qur'an, 2:231, 4:15, & 65:1; Sunnah, Book 10). Basic bodily functions involving women, such as menstruation and

intercourse, are described as unclean and require purification (Qur'an, 4:43 & 5:6, Sunnah, Book 9); this creates a perception that the female body is somehow less clean than the male. Unlike men, women require a male guardian to arrange marriage and although the woman's consent is nominally required, lack of verbal protest is considered to be consent (Sunnah, Book 9), allowing the potential for coercion and manipulation. In issues of jurisprudence, two Muslim women are needed to act as a witness if one Muslim man is not available (Qur'an, 2:82), producing a perception that women are not as reliable as men. The Qur'an and Sunnah even dictate gender divisions in the definition of vanity, extolling women to cover their bodies, keep their gaze down, and abstain from any physical augmentation that might enhance their appearance; men are not assigned similar prohibitions but are allowed vanities such as dyeing their hair (Qur'an, 24:31; Sunnah, Book 32).

The gender roles established in the Qur'an and Sunnah are extended throughout Islamic culture and permeate the ideology (Chishti, 2012; Clycq, 2012; Criteli & Willett, 2012; King, 2009; McLarney, 2010; Predelli; Saifee et al.; Zaker, Zaker & Kraemer, 2013). The home and family are the core element of Islamic society and women are assigned to the sphere of family life while men are assigned financial responsibility and familial leadership (Chishti, 2012; Hu, Pazaki, Al-Qubbaj, & Cutler, 2009; King, 2009; McLarney, 2010; Predelli, 2004; Qur'an; Saifee et al., 2012; Sunnah). These gender roles, particularly among highly conservative Islamic sects, are a key element of Islamic ideology and have a surprising resiliency that can transcend the secular culture of the adherents (Clycq, 2012; Hu et al., 2009; King, 2009; Nisa, 2011; Zaker et al., 2013). For

some adherents, these strict gender roles have created an opportunity for ideologically justified oppression and domestic violence (Criteli & Willett, 2012; King, 2009; Zaker et al., 2013).

Gender roles can impact identity perception, especially when the cultural identity and the secular identity conflict. Modern technology, globalization, and socio-political cultural shifts are challenging the traditional elements of Islam, creating questions about what a Muslim woman should look and act like (Abd-Allah, 2008; Halverson & Way, 2012; Lewis, 2010; Thomas & Sanderson, 2011). Especially in non-Islamic, secularized cultures, a dynamic is developing where Muslim women increasingly have to balance religious guidance, familial pressures, and practical realities (King, 2009; Krämer, 2013; Mishra & Shirazi, 2010; Rangoonala, Sy, & Epinoza, 2011; Sharify-Funk & Haddad, 2012; Stubbs & Sallee, 2014; Thomas & Sanderson, 2011). For some Muslim women, this has led to the adoption of ultra-conservative lifestyles based on exacting religious interpretations, such as the Cadari sect of Indonesia in which strict separation of sexes is observed and women practice total devotion to the family and home (Nisa, 2011). Other Muslim women are embracing political activism as a method to formally resolve the dichotomy of ideology and practical realities (Criteli & Willett, 2012; Rinaldo, 2011; Shaikh, 2013). For some Muslim women, the answer has been the forging of a new religious identity that has been aligned to the values of Western secular culture, such as the two female imams in the United States that have rejected the traditionally male monopoly on Islamic religious leadership (Sharify-Funk & Haddad, 2012).

The complexities of balancing religious and secular identity elements have swelled into an international public discourse about veiling that dominates the current research on female Muslim identity. The covering of a woman's personal physical "adornment" is ideologically directed, leading to a great deal of veiling variety depending on the interpretation (Qur'an, 24:31; Sunnah, Book 32). Any form of veiling is a very public acknowledgement of the woman's religious beliefs and leaves a woman open to public assumptions and perceptions that may not adequately reflect her reality (Al-Saji, 2010; Carvalho, 2013; Davary, 2009; Krämer, 2013; Shirazi & Mishra, 2010; Zimmerman, 2014). Research from multiple perspectives has placed the veil on a spectrum that ranges from a symbol of gender oppression to a tool of independence since it allows Muslim women access to public places while still adhering to religious edicts (e.g., see Al-Saji, 2010; Afshar, 2008; Carvalho, 2013; Davary, 2009; Lewis, 2010; Shirazi & Mishra, 2010; Zimmerman, 2014). The symbolism of the veil appears to be influenced by a variety of factors, including the religious inclinations of the individual, familial beliefs, and the socio-political culture of the wearer (Shirazi & Mishra, 2010). Veiling, or the absence of, has become a defining aspect of a Muslim woman's public and private religious identity that is dominating the research and public discourse, leaving a gap in understanding other elements that may impact that identity.

Throughout the recent discourse on Muslim gender roles and female identity, a strong current of Islamic revivalism can be detected. Krämer (2013) argued that Islam has a long history of adapting itself to modern secular circumstances and that the current challenges the religion is facing are causing another cycle of reinterpretation and

revitalization. This wave of Islamic revivalism can be typified as a re-entrenchment of traditional values and the protective defense of conservative practices (for examples, see Abd-Allah, 2008; A-Saji, 2010; Baer, 2009; Chishti, 2012; Krämer, 2013; Saifee et al., 2012). The measurable influence of this revivalism is still developing within the literature, but it has the potential to impact the perception of Muslim gender roles and female identity, especially for potential converts who may be looking for guidance in developing their own Muslim identity.

Summary

The Internet represents an evolution in media platforms from the static to the dynamic. Social media Internet sites are distinct in that they provoke interaction between readers and authors, creating a multi-perspective discourse instead of a one-sided narrative (Bhui & Ibrahim, 2013). This trait has created an opportunity for both mainstream and extremist elements to connect and influence individuals on a global level. Traditional methods of learning are being extended beyond the physical world to a digital one; social learning follows a similar pattern in both physical and digital locations (Akers, 1998; Holt et al., 2010; Miller & Morris, 2014; Pauwels & Schils, 2014; Tittle et al., 2012). Individuals can be influenced by political ideas and religious ideologies over the Internet platform in the same fashion that they can research and learn hobbies such as cooking or video game shortcuts (Miller & Morris, 2014; Pauwels & Schils, 2014). Islamic fundamentalist organizations have realized the social learning power of the Internet and are utilizing it to extend their radicalization efforts beyond their physical

location to a global scale (Alexander, 2010; Guadagno et al., 2010; Silber & Bhatt, 2007; Venhaus, 2010).

Despite the exceedingly patriarchal nature of Islamic fundamentalist organizations, women as a gender group are not immune to learning radicalization ideologies as is demonstrated by the case of Colleen LaRose, an American woman who learned and adopted a radicalized ideology solely through participation on social media websites, ultimately becoming embroiled in planning the plot to assassinate a Swedish cartoonist (Halverson & Way, 2012).

There are two key knowledge gaps identified in this literature review that were addressed in this research study. First, the impact of differential reinforcement has not been studied in isolation from the other aspects associated with social learning theory, particularly within the context of social media, which are demonstrating an almost meteoric rise in social importance for generations such as the Millennials and Generation Z. Second, while the existing research acknowledges that some Muslim women are adopting an Islamic fundamentalist ideology through digital exposure, research into gender nuances of this radicalization process are undeveloped, creating a void for policy makers keen to disrupt the spread of radicalization. In this study, I addressed the intersection of these two knowledge gaps through the linking factor of social media, thereby providing valuable insight for the development of online counter-terrorism policy options aimed at targeting those Muslim women at risk of radicalization through a digital medium.

In Chapter 3, the research design will be presented. The role of the researcher will be discussed. The methodology will be presented with enough detail to allow replication of the study. Issues of trustworthiness, including credibility, transferability, dependability, and confirmability will also be examined. Finally, ethical concerns for this study will be reviewed

Chapter 3: Research Method

The purpose of this qualitative, exploratory instrumental case study was to develop a greater understanding of how the differential reinforcement tenet of social learning theory may be affecting the conversion and radicalization of Western women towards a fundamentalist Islamic ideology through their participation in the social media platform of blogs on the website Tumblr. In this chapter, I first present the research question, subquestions, design selection, and role of the researcher. The study's methods and methodology are discussed in sufficient detail that it can be replicated. Next, an assessment of issues of quality and trustworthiness focusing on validity, dependability, confirmability, and reliability issues is presented. Finally, ethical considerations are examined. The chapter concludes with a summary.

Research Design and Rationale

The central research question for this study was this: In what ways could an online blog about Islamic self-realization written by a Western female convert create a potential vulnerability for exploitation by a fundamentalist Islamic organization? The two subquestions for this study were as follows:

1. How is differential reinforcement in the form of readers' interactions with the blogs appearing to influence the topic and tone of the case authors' blog entries?
2. How does the reader and case author dynamic of blog participation influence the blog case author's interpretation of Islamic cultural gender behaviors?

The central phenomenon of this study is young women from Western nations learning and converting to a radicalized form of fundamentalist Islamic ideology through their authorship of an online social media blog site. This study specifically focused on the differential reinforcement tenet of social learning theory and its role in virtual social learning of this radicalized ideology.

The design of this study was a qualitative, exploratory instrumental case study methodology. The qualitative methodology was chosen because of its structural flexibility (Creswell, 2009; Maxwell, 2013). Qualitative research is also interactive, providing this study the flexibility to adjust as the topic was explored and data emerged (Maxwell, 2013). Another crucial element of the qualitative methodology for this study was its inclusiveness that embraced the collection of data from unorthodox sources, such as the blogs this study accessed (Maxwell, 2013).

The case study strategy of inquiry provided several tangible benefits. First, the case study approach is particularly well suited for exploratory research such as this, where the targeted phenomenon is a complex contemporary issue with numerous variables and the potential interactions among them as yet unidentified (Yin, 2014). Case studies also allow the researcher to consider the data within a real-world environment where context is crucial and control of participant behavior is not viable, making it ideal to examine data from online blogs (Flyvbjerg, 2006; Rudestam & Newton, 2007; Yin, 2014). Finally, as homeland security officials struggle with the rapidly developing trend of Western women converting to and actively supporting a radicalized fundamentalist

Islam ideology, a case study of this phenomenon provides critical insight for cyber-policy makers and administrators.

Before the case study approach was selected, I considered three other potential strategies of inquiries. Phenomenology was a strong contender due to its focus on exploring a phenomenon from the perspective of those who have experienced it. Because this study was ultimately about the impact of virtual differential reinforcement versus the individual authors' personal experiences (Patton, 2002), phenomenology was not selected. The narrative approach was also considered because it would have provided insight into the personal journey of each blogger, but it would not have addressed the differential reinforcement aspect that makes this study an important contribution to the development of effective, gender-nuanced anticyberterrorism policies (Patton, 2002). Finally, grounded theory was examined due to the emergent nature and lack of existing research on this phenomenon, but, once again, it would have pulled the study in a different direction, away from the key concepts of social learning in an online environment and how those processes can be impacted by policy makers (Patton, 2002). The case study approach is the qualitative strategy of inquiry that best balanced the exploratory nature of this study and the concepts of social learning theory in the online environment and how cyber policy makers may be able to influence the development of this phenomenon.

Role of the Researcher

The role of the researcher in this study has been heavily influenced by the virtual nature of the research environment. Because the blog archives sampled for this study

were already written, posted online for mass consumption, and interacted with by other individuals, I was necessarily locked into the role of a public observer of what had already occurred. I maintained the role of public observer for the blog posts that were added during the sampling period and did not participate in any of the three chosen blogs in any way. The main benefit of this role is that there are no validity or reliability concerns about my influencing the blog data (Patton, 2002); case authors had already created their postings in total isolation from any researcher involvement. The drawbacks to this role are the inability to clarify any inconsistencies within the raw data and no follow-up capabilities. As I will explain in Chapter 4, I addressed these potential limitations through extensive use of the blog archival function and transparency in my analysis process (including the specific notation of any raw data inconsistencies).

My professional background has been with the United States Air Force in the Intercontinental Ballistic Missile Career field. I have had no personal or professional relationships with the authors of the sampled blogs, any individuals who have converted to a fundamentalist Islamic ideology, or any users of the social media platform Tumblr. The data collected for this study are completely free of any potential power relationship dynamics.

As discussed in Chapter 1, researcher bias could potentially have stemmed from my being a non-Muslim Westerner living in a country currently engaged in military operations against fundamentalist Islamic organizations. I managed potential bias by attempting to mitigate it with self-education in classical Islam through the reading of the Qur'an and Sunnah in an effort to develop sufficient cultural and ideological perspective.

Potential bias was also mitigated by keeping the focus of the study on identifying an ideological shift in each of the three bloggers without assigning any value judgments to their beliefs. This study focuses on the process of virtually learning radicalization and not on subjective judgments. No other potential ethical issues regarding the role of the researcher were identified.

Methodology

This section describes the methodology used in this study in enough detail that it could be replicated. It provides enough information that an independent analysis of the quality and rigor of the study can be accomplished. Data sources are provided, sampling size is discussed, the data collection method is detailed, and the data analysis process is explained.

Participant Selection Logic

This study focused on young adult women from Western countries converting to a fundamentalist Islamic ideology and exhibiting radicalized speech on social media, culminating in the expression of a desire to leave home, travel to a Muslim nation, and join a jihad organization, such as ISIS. Therefore, the population for this study was women aged 18 to 29, living in a Western country, who had converted to a conservative interpretation of Islam, and who used the social media site Tumblr to publicly explore their new faith, up to and including support for fundamentalist-driven jihad. As stated in Chapter 1, the case authors' age, gender, and nationality were assumed to be truthful as presented within the blog.

This case study purposefully sampled three blogs on the social media site Tumblr. I chose Tumblr based on several criteria. First, because this study would rely primarily on virtual musings, it was crucial to ensure that enough raw data were available from each case to ensure as rigorous an analysis as was possible. Therefore, social media sites that limit the number of characters in each post, such as Twitter, provided data that were too cursory for in-depth analysis. Tumblr does not have any character limitations. Second, the chosen social media site had to appeal to a wide variety of discussant interests. Some social media sites are intended for a targeted purpose, such as Pinterest's aim of being a digital bulletin board of craft ideas. This and other focused interest sites such as deviantART, Goodreads, and LinkedIn do not encourage the personal musings about religion, personal identity, and questions of beliefs that this study was seeking. Third, this study focused on the evolution of the case author's thinking, requiring her to be a regular contributor over at least a year's time so the chosen site required access to past postings. Finally, the social media site chosen had to appeal to the study's population.

Tumblr best met these four criteria. Its blog format allows individuals to freely express any personal thoughts and easily share them with a global audience. It permits users to post a variety of content, including personal posts, quotes, and pictures; there are no character limits to artificially stifle the author. Tumblr is also most popular with young adults between ages 18 to 29, with a slightly higher average of female users (Duggan & Brenner, 2013). Tumblr provides its contributors the opportunity to remain anonymous or to use a pseudonym, making it appealing to those musing about potentially controversial topics. Finally, Tumblr's archival feature made it possible for me to verify the lifespan of

an account, track the consistency of contribution, and access an extended period of entries.

Several other social media sites were considered but ultimately were not chosen because they did not offer the same characteristics as Tumblr. Facebook, for example, may be the most popular social media site, but it is more popular with an older demographic and access can be limited due to user account requirements (Duggan & Brenner, 2013). The enforced brevity of Twitter, as previously discussed, would not have provided enough in-depth data. Traditional blogs were also considered, but they suffer from an extremely high rate of abandonment, making it difficult to identify blogs active long enough for in-depth observation of the author's evolution of beliefs (Quenqua, 2009). Overall, Tumblr combined the anonymity and ease of contribution that encourages a younger population base. Several confirmed cases of Western women who illegally emigrated to Syria to join ISIS have continued to maintain Tumblr accounts, making it an ideal social media site to focus on.

Sampling Strategy

Both Stake (1995) and Yin (2014) objected to the use of the term *sampling* for case study research because it implies a level of generalization and representation that are beyond the scope of a qualitative case study. Despite this, *sampling* is fairly universal in the research process and has value in providing a clear understanding of why the selected cases were targeted. Therefore, I use the term *sampling* to indicate how blogs were selected for this study. This section provides a detailed accounting of how the three blogs were chosen.

This study utilized a purposeful sampling strategy, combined with snowball sampling when required. I chose blogs that met the criteria for this study as well as provided enough raw data on the authors' ideological beliefs over a sustained period of time to ensure as rigorous and focused an analysis as possible. Purposeful sampling provided me the advantage of being able to select cases that best illustrated the core phenomenon of this study (Maxwell, 2013; Patton, 2002).

Several criteria defined the purposeful sample. First, the blog had to have been in existence long enough to provide sufficient data. Therefore, a potential blog case had to have been active for at least 1 year, with past postings accessible through the Tumblr archive function. Within that year period, the author of the blog must have had at least 10 months where at least two narrative posts were uploaded. Each month must also have had at least two posts that were linked to the author's personal ideological beliefs; this criterion could be met through a variety of posting types, including poems, images, and text.

Second, the selected blogs had to be authored by an individual that met the identified population of this study, specifically female converts to Islam from non-Muslim, Western countries. This required the selection of blogs in which the authors provided some biographical data or where clues (e.g., phrasing, descriptions of places and activities that could be reasonably tied to a specific nation, technological country-of-origin markers such as the site's server language) could be discerned. In accordance with the assumptions laid out in Chapter 1, user profiles and biographical data were assumed to be a faithful representation of the author's nationality and gender.

Finally, the identified cases had to illustrate the core phenomenon of the study: the virtual learning of a progressively more conservative Islamic ideology up to and including extremist Islamic fundamentalism. I screened each potential blog for evidence of a shift in the author's personal ideology (e.g., increased postings about supporting a conservative interpretation of Islam). I also examined them for evidence of differential reinforcement such as the presence or lack "shares" of others' postings on fundamentalist Islamic ideological beliefs and the presence or lack of positive comments from readers.

This sample size for this study was three cases, with each case involving thousands of blog entries that spanned 21 months. This sample size is supported by the purpose of qualitative case study research, which is the comprehensive examination of a complex phenomenon; case study research is intended to establish an exhaustive, meticulous, and in-depth analysis to establish potential transferability versus the wide breadth of analysis needed for generalizability (Flyvbjerg, 2006; Maxwell, 2013; Patton, 2002; Yin, 2014). Exploratory instrumental case study research such as this should focus, according to Yin (2014), on a few cases that allow the identification and description of the developing phenomenon versus searching for theoretical variations across a multitude of cases. Yin (2014) further argued that, for an exploratory case study focused on an emerging phenomenon, a sample size of greater than three cases could quickly become repetitive. Saturation occurs when the maximum data to benefit ratio has been reached; each case must offer a specific value to the study or its inclusion is unnecessary and even potentially distracting. A fourth or fifth case will not necessarily improve the identification and analysis of this emerging phenomenon any better than three extensive

cases but instead, create the risk of too cursory an analysis due to the large amount of raw data involved. Based on the advice detailed above, I used a sample size of three cases to balance rigor and saturation against unnecessary repetitiveness.

The Tumblr blogs that were sampled for this study were already established as active accounts with over a year's worth of archived data posted in a public forum, widely accessible to anyone with Internet access. Tumblr required no passwords or memberships to access the contributors' blog sites; although the home page of Tumblr prompts users to log-in or sign up, it offers an "explore Tumblr" link below the log-in fields that allows a noncontributor, such as myself, to search and read any of the contributors on this social media site.

No contact with the case authors of the sampled blogs was initiated or attempted. Blogs were chosen based on the criteria discussed above. In summary, a case chosen for this study had to be a Tumblr blog that was at least one year old as of 1 July, 2015; the account's archives had to be accessible; the case author was required to be an initially non-Muslim woman from a Western nation who had converted to Islam; the content had to include regular posts about personal ideological beliefs; there had to be evidence of an ideological shift towards a more conservative interpretation of Islam; and finally, there had to be an indication of differential learning, such as the sharing of other Tumblr users' posts about ideological topics.

The identification of potential cases involved a multi-step process. First, I carried out a general search of Tumblr using keyword combinations based on the central phenomenon and common Arabic words that relate to Islam (e.g., *Muslimah*, *dunya*,

Islamic awakening, *Islamic sisterhood*, *Islamic revert,* and *Islam conversion*). Each resulting blog account was assessed against the selection criteria detailed above. Those that meet the initial criteria were then assessed for the quality of data. Finally, I gave preference to those blog accounts that had more text posts about ideological beliefs as this type of post allowed more specific insight into the perspective of the author than an image could reliably offer.

Instrumentation

It is a unique quality of qualitative research that the instrument for data collection is often the researcher; it is the observations of the researcher that form the data for analysis (Peredaryenko & Krauss, 2013; Rudestam & Newton, 2007). This qualitative case study used the researcher as the data collection instrument for two key reasons. First, the researcher as an instrument provides a conduit from the participants' perspectives to the central phenomenon (Rudestam & Newton, 2007). The researcher as an instrument is able, in a way that nonhuman instruments cannot, to capture the complex nuances of the human experience, thereby gaining a more holistic understanding of the targeted phenomenon. Second, the researcher as an instrument is more adaptive to the shifting structure needed for exploratory research (Maxwell, 2013). The researcher is more adaptable and capable of following data shifts than even the best nonhuman instruments. Therefore, the researcher was utilized as the data collection instrument for this study. Sufficiency of data collection was established when each case yielded at least five data points that corresponded to the main research question and each of the two subquestions.

Data Collection

I collected three types of data: archival blog postings, my observations of the postings, and a field notes/researcher journal. Archival blog postings were collected through Tumblr's archive function. I printed and placed each blog's posts in chronological order beginning with January 1, 2014 through September 30, 2015. The key benefit to securing the raw data in this manner was that it established a true representation of each blog post at the moment of sampling, protecting the data from any entry or account erasures. I recorded my observations in the margins of the printed posts and in my researcher journal. I created the field notes/researcher journal in conjunction with the other data collection methods, and I used it to record my thoughts, ideas, and impressions as the data collection and analysis unfolded. The original proposal for this study included provisions for additional cases if the initial sampling did not yield enough data, but this contingency was ultimately not needed because of the large amount of data collected from the three cases originally selected.

Preliminary Coding Strategy

All three sources of data addressed the main question and two subquestions of this study. Collected data was organized in Microsoft Excel and coded. The first round of coding utilized ideologically based a priori codes from the following ideological spectrum (see Figure 1).

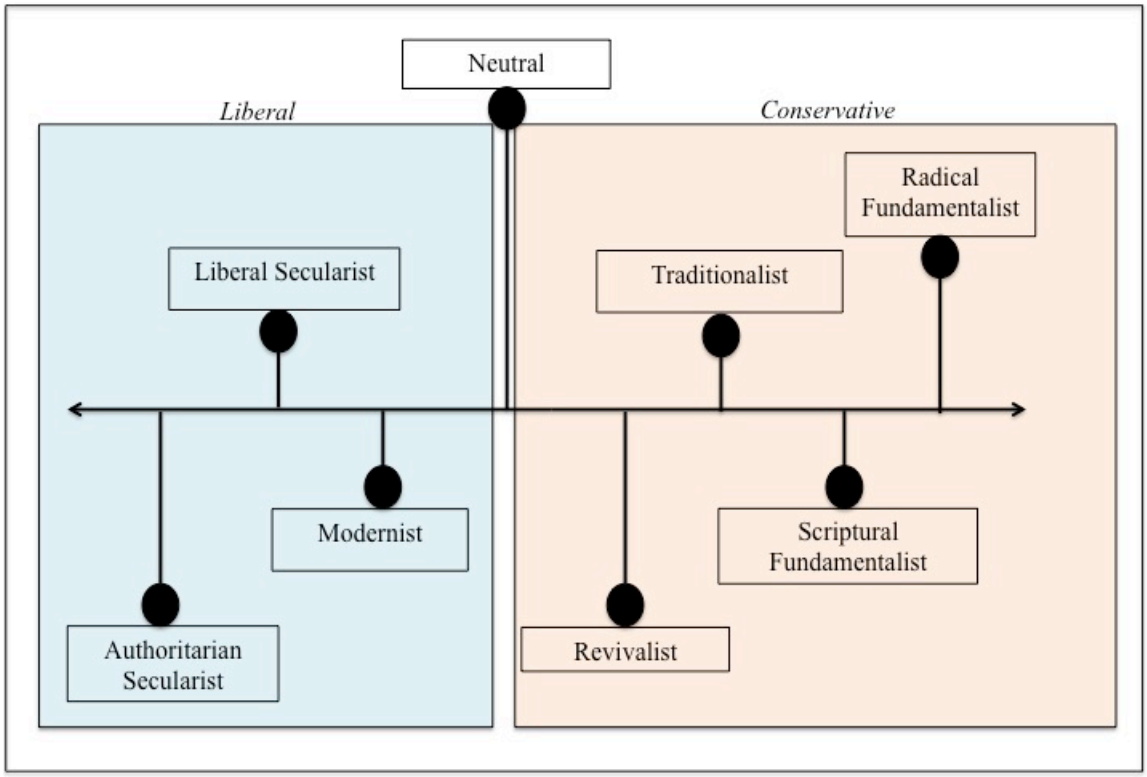

Figure 1. Islamic ideology spectrum illustrating different Islamic ideological variations, progressing from ideological liberalism on the left to ideological fundamentalism on the right.

I developed this figure from several different sources to provide a visualization of the major ideological positions in modern Islam (Baker, 2009; Mohamad, 2010; Kramer, 2013; Rabasa et al., 2004; Saifee et al., 2012). In this typology spectrum, seven major variations of Islamic ideology and a neutral position were used as orientation benchmarks between fundamentalist Islam and liberal Islam. As noted in Chapter 2, ideological radicalization is not necessarily a linear or one directional process (Silber & Bhatt, 2007); this spectrum is fluid and using it for the a priori codes was intended to capture the case authors' evolution of ideology. Additionally, the terms "fundamentalist" and "liberal" were applied as a description of the interpretation of Islamic ideology and its influence on

the case authors' socio-political beliefs. The terms are not meant to be divorced from the ideological components as it is not meant to be used solely for political orientation.

Left of the neutral position is the ideologically liberal side of the spectrum. On the far left, an authoritarian secularist places the secular state in the dominant position, using violence as necessary to retain the power of the state, co-opting the hierarchal structures of Islam to aid in in its retention of power (Rabasa, 2004). Moving to the right, a liberal secularist consigns religion to the home and promotes secular law and government with no ideological influences (Rabasa, 2004). Just to the left of the neutral position, an Islamic modernist attempts to balance Islamic values with modern realities, focusing on social and welfare activism with religious law conforming to the modern state (Rabasa et al., 2004; Rangoonala & Epinoza, 2011; Shaikh, 2013).

The right hand side of the spectrum represents ideologically conservative positions. Immediately to the right of center, the revivalists tend to embrace a more conservative interpretation of Islam while maintaining political moderation (Abd-Allah, 2008; Baker, 2009; Chishti, 2012; Kramer, 2013; Mohamad, 2010; Saifee et al., 2012; Rabasa et al., 2004). Further right of the revivalist position is the traditionalists who espouse an increasingly conservative version of Islam accompanied by conservative political beliefs (Abd-Allah, 2008; Kramer, 2013; Rabasa et al., 2004). Both revivalists and traditionalists lend primacy to the cultural and religious aspects of Islam over the political issues (Abd-Allah, 2008; Baker, 2009; Chishti, 2012; Kramer, 2013; Mohamad, 2010; Rabasa et al., 2004; Saifee et al., 2012).

Moving right once again, scriptural fundamentalists adapt an ultraconservative reading of sharia and tends toward political conservatism, but lacks the commitment to violently creating a separate Islamic state (Rabasa et al., 2004). Individuals who adhere to this type of ideology may become members of restrictive communities, such as the Indonesian Cadari sects (Nisa, 2011; Rabasa et al., 2004). The rightmost benchmark on the typology spectrum is radical fundamentalist which marries ultra conservative Islam with political goals (Rabasa et al., 2004). The key defining feature of radical fundamentalism is the willingness to violently destroy secular government and replace it with an ideologically driven government that conforms to ultra-conservative, literal interpretations of sharia law (Rabasa et al., 2004).

Subsequent rounds used in vivo coding were based on the identified themes and patterns found in the vocabulary, ideas, images posted by the case author and from case author and reader discussions. I originally proposed mind maps as my primary analysis tool, but as explained in Chapter 4, Microsoft Excel, column graphs, and line graphs ultimately proved more useful.

Throughout the data analysis, indications of differential reinforcement within the blogs ("likes," "shares," or comments) were tracked to see if an identifiable pattern linked them with movement along the ideology spectrum as indicated by a change in the frequency and tone of blogger postings. Emergent themes were identified and cross-checked against all three cases to identify any patterns that aligned with research questions. As all three cases were purposefully sampled as examples of this phenomenon, discrepant cases were neither expected nor found.

Issues of Trustworthiness

The flexible yet focused nature of qualitative case study research and the technique of purposeful sampling has led some researchers to critique the overall trustworthiness and the quality of research that can be obtained from this methodology (Stake, 1995; Yin, 2014). Concerns about case study research, however, are mitigated by the plethora of processes used by scholars to assess the methodology to ensure the credibility, transferability, dependability, and confirmability of the study. This section details the processes I implemented.

Credibility is commonly used to describe the internal validity of qualitative research (Creswell, 2013; Golafshani, 2003). Credibility establishes the trustworthiness of the analysis and conclusions of the study. One way credibility can be established is through triangulation (Creswell, 2013; Stake, 1995; Yin, 2014). Triangulation requires using multiple sources of data, based on the argument that a finding is increasingly more credible in proportion to the number of data points that can be linked to it (Yin, 2014). This study used triangulation by including three types of data sources: archival records, researcher observations, and the field notes/researcher journal. Credibility was also established through prolonged contact with the data sources. I sampled 21 months of postings for each of three blogs: nearly two years of data, amounting to 20,000+ printed pages for coding and analysis.

Transferability is the qualitative term used to describe the external validity of a study and pertains to whether or not the study's findings can be applied beyond the study's sampled cases (Creswell, 2013; Yin, 2014). This is subtly different from

generalizability, which is the ability to apply a study's findings to a larger population based on the sample and is more applicable to quantitative research (Flyvbjerg, 2006; Yin, 2014). Determining transferability requires detailed data, methodology, and analysis descriptions to gauge the relevance of a study's findings and potential applicability to other cases (Creswell, 2013; Yin, 2014).

I employed comprehensive descriptions in all aspects of data collection, methodology, and analysis so as to establish the process transparency necessary for others to determine whether this study has transferability to other unique situations. Varying the participant selection of a study also increases transferability, and while this study depended upon purposeful sampling to explore a targeted phenomenon, I attempted to vary the participant selection as much as is possible by choosing blogs written by women from different countries.

Dependability is the qualitative equivalent of reliability and indicates the consistency and trustworthiness of the data, analysis, and findings (Creswell, 2013; Golafshani, 2003; Yin, 2014). Similar to the requirements for establishing credibility, multiple sources of data that provide the opportunity for triangulation enhanced the dependability of this study (Yin, 2014). Additionally, the rich, thick descriptions that were key to establishing the transferability of this study were also a crucial element in its dependability by providing substantial detail on the processes used to collect data, analyze that data, and develop findings so that replication by others would be possible (Creswell, 2013; Golafshani, 2003; Yin, 2014). Finally, I utilized a case study database to organize and document all of the collected data in a manner that will make it possible for

others to verify my analysis process (Yin, 2014). Originally, I proposed building the case study database through Microsoft Word, but ultimately Microsoft Excel proved to be a more effective and efficient organizational program for the large amount of data collected.

Confirmability is the qualitative equivalent of objectivity, which can be particularly difficult in qualitative research where the perceptions of the researcher can be a valuable contribution to the analysis (Stake, 1995; Creswell, 2013; Yin, 2014). The key to confirmability is to acknowledge but also then bracket out the researcher's potential preconceptions; this is accomplished through reflexivity, or the process of self-examination and reflection (Hsiung, 2010). As a non-Muslim living in a country that is currently engaged in armed conflicts against fundamentalist Islamic terrorist organizations, there was a potential for my research to be hijacked by my own assumptions. I addressed this in two ways. First, I extensively researched and read large portions of Islamic religious texts and current research on Islamic Feminism to familiarize myself with Islamic history, ideology, and gender norms so as to obtain a degree of cultural perspective that assisted in deterring unfounded assumptions. Second, I consciously focused on the experiences of the case authors as communicated through their blog postings without attempting to impose any moral judgments; the focus of this study was on learned ideological shifts and not on the establishment of "right" versus "wrong."

Ethical Procedure

In this study, I used data that had been shared on a publicly accessible social media site, posted with the intention of sharing it with anyone who read it. Content posted on Tumblr is publicly accessible without the need to create an account through the use of the "explore Tumblr" link on the main log-in page (Tumblr, 2014). Tumblr's terms of service specifically warn users in both legal terms and in a simplified explanation that all data published by a contributor is publicly available and cannot ever be definitively erased (Tumblr, 2014). Given the very public nature of the Tumblr blogs, no additional agreements for access were necessary. Each sampled blog was assigned an alphabetical label that was used throughout the case study database and the research report to institute further protection of the case author's anonymity beyond any pseudonym the case authors used themselves.

There were no anticipated vulnerability concerns regarding this data. Accessing and analyzing these blogs did not cause any increase in the vulnerability of the case authors beyond that they themselves had already assumed through their own actions. Recognizing the sensitivity of this topic, I initiated no direct contact with the case authors of their blogs, thereby eliminating any remaining potential security or exploitation concerns.

While social media is replete with copyright infringement, I took great efforts to not duplicate that trend. Images and quotes within the blogs were described and discussed in the analysis but not re-printed within the research report so as to avoid any inadvertent copyright infringement.

Data collected for this study will be stored electronically within a password-protected database and will be maintained for five years, at which point it will be destroyed. Access and dissemination of the data will require a request in writing and verification of the intended use. Approval for this study was received from the Walden Institutional Review Board, approval number 09-04-15-0256405.

As this study was aimed at tracing the potential evolution of an ideological radicalization, there was a small chance that intentions of illegal activity might be discovered. If that unlikely instance had occurred, a process was put into place to cease all data collection and to seek guidance from the committee chair and appropriate law enforcement. As expected, this contingency did not have to be activated.

Summary

In this chapter, the methodology for this study was presented. This exploratory instrumental case study consisted of a sample size of three cases that were purposefully selected because they demonstrated the phenomenon of learned online radicalization towards a fundamentalist Islamic ideology by young women from Western countries who had converted to Islam. Data was collected from the social media site Tumblr, chosen because of its blog concept, popularity with young adults, and archival function. Data analysis was based on an ideology typology spectrum, graph analysis comparison, and pattern recognition. Trustworthiness and quality for this study were ensured through the use of several techniques aimed at increasing transparency and validity, including data triangulation, comprehensive descriptions of the data and analysis process, and the creation of a case study database. There were no ethical concerns anticipated or

encountered during the study. Data will be stored electronically for five years and then destroyed; access to the data will be controlled and require verification of need-to-know and intended purpose.

In Chapter 4, I will present the data that was collected for this study. This will include a synopsis of the data collected and the results of the data analysis. This analysis will then be applied to the answering of each research question. Finally, the trustworthiness of this analysis will be reviewed.

Chapter 4: Results

The purpose of this qualitative case study was to develop a greater understanding of how the differential reinforcement tenet of social learning theory may be affecting the radicalization of Western women towards a fundamentalist Islamic ideology through their participation on the social media platform Tumblr. This chapter presents the results in the context of the research questions. The main research question was this: In what ways could an online blog about Islamic self-realization written by a Western female convert create a potential vulnerability for exploitation by a fundamentalist Islamic organization? The two subquestions were as follows:

1. How is differential reinforcement in the form of readers' interactions with the blogs appearing to influence the topic and tone of the case authors' blog entries?
2. How does the reader and case author dynamic of blog participation influence the case author's interpretation of Islamic cultural gender behaviors?

The setting of this study and the sampling demographics are discussed first. Next, the process used to collect the data and the data analysis is presented. After that, strategies used to ensure evidence of trustworthiness are examined. The chapter concludes with an assessment of the results as they pertain to and answer the research questions.

Setting

The setting for data collection was the social media site Tumblr, whose microblog format, anonymous settings, public access, and popularity with young adults made it the ideal social media format to study the research questions. Case data posts were retrieved

through the social media site's public portal. There were no personal or organizational conditions that affected or influenced the participants or their experience as all of the data collected were written and posted to Tumblr prior to their collection.

Demographics

I selected three cases through a two-fold process. In the first phase, I began with a keyword search of Tumblr, using words such as *Islamic feminism*, *muslimah*, and *revert*. I then assessed the returned search results against the purposeful sampling criteria described in Chapter 3. First, I checked the archive of a potential case to ensure the blog met the criteria of having been active for at least a year and that at least 10 months of that year included at least two narrative posts. If a potential blog met the time criteria, I then examined it for the identified population criteria of having been written by a female between the ages of 18 and 29. The age requirement for this study proved to be an unexpected difficulty as there were a large amount of Tumblr blogs authored by girls 14 to 17 years old that contained fundamentalist Islamic commentary. After the age of the author was confirmed, I verified that the author was living in a Western, non-Muslim country. This was sometimes a difficult criterion to ascertain because many of the potential case authors obscured their location. Finally, I examined the potential cases for indications that the author was a revert to Islam, through markers such as self-identification, participation in digital conversations about reverting, or posts about the author's "revert story." If a case met all of the above criteria, I placed it into a list of potential cases.

The second phase of purposeful sampling consisted of a more thorough vetting of the potential cases to select those that would best illustrate the core phenomenon of the study: the virtual learning by the authors of increasingly conservative Islam ideology, to include elements of fundamentalism. This criterion was encapsulated by the presence of differential reinforcement on ideological posts: questioning the author for further information, offering explicit support or admiration for the posts, and expressing more generalized praise for the author's chosen beliefs. For example, the blogger ultimately chosen as Case A posted a great deal of original poetry that often featured a woman in love with a jihadist, attracted to the violence she saw in him. Many of these poems received direct feedback from other Tumblr users to include asking for more poems and telling the author she "should write a book."

This two-phase sampling process initially produced three cases. However, the case author deleted the Tumblr blog originally selected as Case B before any data could be collected. The replacement Case B was selected through snowball sampling, identified through a Tumblr warning post that listed a set of blogs that appeared to be fundamentally extreme. I vetted each blog on the list and selected the one that best met all of the criteria described above; this blog then became the new Case B.

All three of the cases selected for this study were on the conservative side of the ideological spectrum. Case A was the most ideologically extreme, and Case C was the least ideologically extreme, with Case B in the middle of the two other cases.

Case A

Case A was a 21-year-old female revert. Her sexual orientation was heterosexual, and she was not in a relationship for the entire sampling period, although she did reference receiving an ultimately rejected marriage offer during this time frame. She reverted to Islam in 2012 but did not consider herself as "seriously practicing" until 2013. Prior to her conversion, she adhered to the Jewish faith for 6 years, and before that an eclectic mix of Christianity and agnostic ideologies. She wore a niqab despite familial objections.

This blogger's exact nationality and ethnicity were difficult to determine because she purposefully concealed them through a combination of misdirection, avoidance, and outright refusal. She wrote in English with the fluency of a native speaker, using slang expressions with few to no word or sentence structure errors. While the setting of her language preferences on her Tumblr account was Turkish, she admitted to another Tumblr user that she did not actually speak Turkish. She confirmed to other Tumblr users that she lived in a Western state, discussed the difficulties of wearing a niqab among a non-Muslim majority population, used some speech patterns associated with British English, and expressed familiarity with a British shopping chain yet paradoxically circulated an online petition asking her British followers to sign it, stating "I'm not in the UK but I would sign this if I was!" She also stated several times that she was not in the United States. These indicators from her blog suggested it was highly likely that she lived in Western Europe. Absolute confirmation was not possible. Nevertheless, she met the sampling criterion of being from a Western state based on her own admissions.

Case A had a close relationship with her mother, who followed her daughter in reverting to Islam. However, Case A's mother found her daughter's beliefs "extreme" and, according to the case author, labeled her daughter's ideological dogmas as a "sword-type jihad." Case A's insistence on wearing a niqab was also a source of tension between the two. Despite these tensions, Case A regularly described how much she loved her mother. Case A had no relationship with her father, whom she characterized as an abusive alcoholic who abandoned her and her mother many years ago. She had no siblings.

During the sampling period, Case A attended university but struggled to maintain her grades. At several points during the sampling period, she referenced part-time employment, including an unsubstantiated claim of being an "ex-director of a PR department" when she was 18 years old and still attending university. Her mood appeared mercurial; she often wrote about her own depression and anger while vacillating between the extremes of friendly helpfulness and aggressive hostility towards her readers. The sampling period included her transition from vegetarian to vegan.

The sampled data from Case A's blog were very diverse. She interacted frequently with other Tumblr users; solicited questions she then did not always answer; added religious advice and religious reflection; fantasized about her wedding; expressed longing to be anywhere but where she was; composed hundreds of violent and morbid prose; liberally peppered her posts with pictures of unicorns, wolves, and My Little Pony; and obsessed over violent imagery. Case A created an impression of being physically and socially isolated, albeit by her own choice, with an active digital presence.

Case B

Case B was a 22-year-old female revert. Her sexual orientation was heterosexual. Relationship details were sparse for this case, as the case author progressively gave fewer and fewer personal details as the sampling period advanced, but she did make reference to looking for an arranged marriage when her blog was newly started. Her reversion details were similarly sparse and not directly addressed; however, commentary outside the collection period referenced a Catholic upbringing. She appeared to have reverted in her early teens, as she referenced secretly rebelling against the proscribed prayers in her Catholic high school and fantasizing about pop stars singing Muslim prayers to her. She wore a niqab.

Case B also masked her exact location, although she confirmed she lived in a Western, non-Muslim country. Her nationality and ethnicity were a great deal harder to assess because she interacted less with other Tumblr users and therefore provided fewer clues. She wrote in English with the fluency of a native speaker.

Case B's relationship with her mother was represented as tense. Case B interpreted her mother's corrections as manipulation based on guilt and admitted her mother's constant interest in a future spouse was embarrassing. The mother was also reported to have actively argued against her daughter's desire to marry an Islamic man who dressed traditionally including a full beard. Case B did not discuss any relationship, good or bad, with her father and she has one brother.

During the sampling period, Case B attended university but made no reference to any employment. Her mood in earlier posts, including those outside the sampling period,

was generally upbeat, although it became more difficult to determine as the sampling period progressed and she withdrew her personal commentary. Early in the life of the blog, the case author discussed how she often struggled to socially connect with other young women and felt limited by her religion that forbade close relationships with young men.

The sampled data from Case B were less diverse than the other two cases. Earlier posts included personal reflection and opinion, but as the sampling period progressed, the case author began to withdraw from personal postings and focused more heavily on religious quotes and reblogged religious commentary. Case B created the impression of someone who was pulling back into her ideology as her blog evolved from the personal nature of her earlier postings into a more controlled, sterilized blog that communicated a single topic message.

Case C

Case C was a 22-year-old female revert. Her sexual orientation was heterosexual, but she described herself as a "pro-gay Muslim" and actively advocated for gay rights both in the Muslim community and in the world in general. She was unmarried at the beginning of the sampling time frame but married a Muslim man about halfway through the sampling period. She was raised Christian but felt "drawn to Islam" from her teens. She secretly reverted at 14 years old but hid her reversion and did not actively practice Islam until 18 when she repledged her commitment to Islam publicly at a mosque and began to openly live as a Muslim. She wore a hijab, sometimes with an abaya. On occasion, she wore a burqa, describing how it made her feel both safe and free.

Case C was a Caucasian South African who had lived in Western Canada for several years. She was fluent in both English and Afrikaner, although she lamented her diminishing fluency in Afrikaner from disuse. Although she lived in Canada, she traveled to South Africa on occasion, including once during the sampling period.

Case C's relationship with her parents was tense. She struggled with her mother's open disapproval of her religion, especially the case author's choice to wear hijab, which her family refers to as her "head thing." Her mother was "embarrassed" by her daughter's hijab and "belittles" her about it in an attempt to get the case author to abandon it. Her father was concerned that she was at risk of extremism, and the case author chaffed at his interrogations over her ideological stances. She felt pressured by her parents to conform to what she perceived as the Western "dating and marriage culture," feeling that they wanted her to live with someone before marriage and that they therefore disapproved of her waiting until marriage to cohabitate. She was uncomfortable at family events and felt as though she was forced to constantly justify her religion-driven behaviors such as not hugging male cousins, wearing her hijab even around family members, and avoiding haram food and drink items. She had one sibling, an adopted sister, to whom she was very close.

Case C was attending university classes at the beginning of the sampling period, but, by the end of it, she had stopped because she felt "It wasn't for me." She held a variety of retail jobs during the sampling period, including working in a Muslim clothing store and a jewelry store.

The sampled data from Case C was very diverse. She was very sociopolitically active, posting a large amount of commentary on topics such as racial inequality, religious intolerance, and the Palestinian cause, including support for Hamas. She interacted with other Tumblr users, followed and reblogged Islamic scholars, shared religious quotes and reflections, posted humorous videos, and added selfies of herself to show off her makeup or a new hijab style several times a month. Case C created the impression of an outgoing, social person who was passionate about her selected causes and never backed down from her position on them.

Data Collection

I collected data from three sources: the archived blog postings, my observations of current blog postings by the three case authors, and field notes. I collected the archived data by accessing the public archive for each case and printing out a hard copy of each blog entry posted between 1 January 2014 and 30 September 2015. This created 21 months of archived data for each case. I then organized it into monthly data sets, dated every entry, and collated them into binders. There was a great deal of variance in the size of the monthly data sets, both within each case and between the cases. For Case A, the smallest monthly data set was 99 entries and the largest was 1,079 entries. Case B ranged from 29 to 166 monthly entries. Case C ranged from 192 to 1,632 monthly entries. In total, I collected more than 10,000 blog posts from Case A, more than 1,700 blog posts from Case B, and another 10,000 plus blog posts from Case C.

Although the hard copy production of the sampled data sets required a large amount of time and resources and forced me to hand code, it was the best choice for

several reasons. First, the fluid nature of Tumblr gave the authors the ability to delete specific blog entries or even their whole accounts, leaving me then unable to access them. For example, as I was double checking some dates on the data sets for Case A about a month after I finished collecting them, I noticed some entries had been deleted and the only tangible proof those blog posts had ever existed were my hard copy data set binders. Second, the formatting of the data was not conducive to electronic storage. I experimented with a few different methods of electronic recording of the data, including copying and pasting each blog entry into another electronic document and screen shots, but I found that the formatting of a Tumblr social media page did not render itself into a usable format when copied into another electronic document. Finally, the hard copies provided me with verifiable proof of originality of the collected data and protected against any possibility of accidental or purposeful tampering as well as helping to maintain the anonymity of the sampled blogs. When my computer needed service during the middle of the data collection period, I was confident that no access to the data files was gained and that the identity of the bloggers was secure because their data files were not physically on the computer.

The second type of data I collected was my observations of blog postings outside the archived sampling period. These were recorded in my researcher journal. Of specific note were the observations I made of each case after the fundamentalist Islamic terrorist attacks in Paris, France in November 2015 and Brussels, Belgium in March 2016.

The third and final type of data I collected was field notes, annotated on the hardcopy case data and in my researcher journal. The field notes included several

elements. First, I made specific notes on blogger posts, for example the apparent yet unrecognized self-hypocrisy of Case A complaining about people who spend their free time online insulting her blog while she herself posted hundreds of entries each month. Second, my field notes contained my thoughts as the researcher that developed from working with the data, such as the difference in Case B's blog style from the other two cases or what I perceived as the "black and white" attitudes towards socio-political causes observed all three cases. Third, I added excerpts from email conversations and notes from verbal conversations with my committee chair into the field notes. These brainstorming sessions often spurred new connections, such as a different way to view social learning in the digital environment that was keyed by her questions about reader- versus author-led interactions. Finally, I annotated important process details, such as the collection process and the use of Google Translate when required. These field notes were key in the development of in vivo codes and later, theme identification.

One unexpected challenge occurred during data collection: my underestimation of the amount of data that would develop from the extended sampling period of the archived entries. This led to significantly more data collected than I had originally expected; however, it did not impact the basic process of data collection and recording.

Data Analysis

I began the data analysis process by coding the data and followed the same basic coding process throughout this study. Collected data was first hand coded and then transcribed into an Excel database, with each entry consisting of a description of the blog post, the codes assigned to it, and the number of reader interactions, or *notes* that post has

received. *Notes* on the Tumblr forum is an accounting of how many other Tumblr users "liked" the post, reblogged the post, and/or commented on the post, thereby providing the author and any subsequent reader the numerical value of how often that particular post was interacted with by readers (see Figure 2).

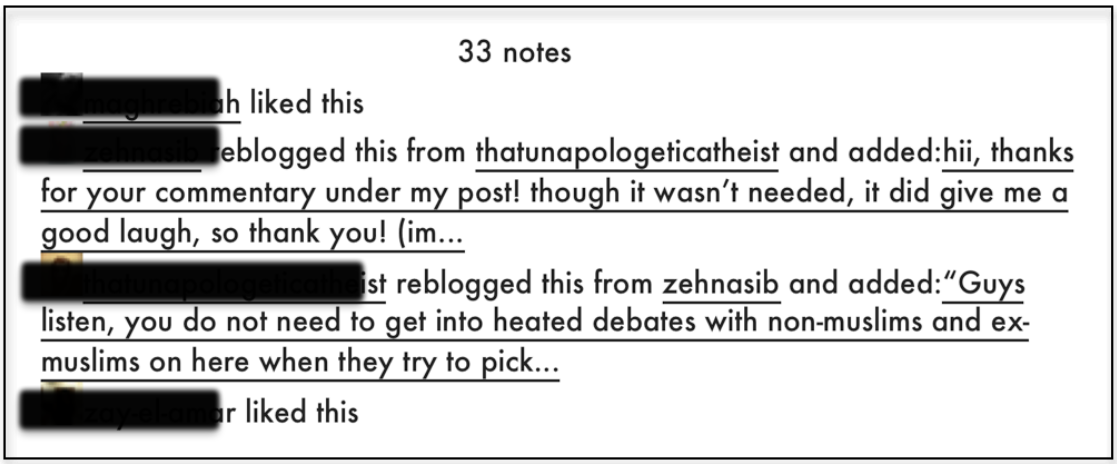

Figure 2. Example of Tumblr notes section.

The notes sections of a Tumblr blog give blog authors the ability to monitor how their posts are being received by others: more notes means more reader interaction, and less notes means less reader interaction. As the purpose of a Tumblr account is to attract readers' attention, the number of notes directly speaks to the popularity and acceptance of each post by the author's digital community and gives the author feedback on how it is being received.

Monthly data sets were coded and transcribed in a random order (versus a chronological order) to protect against any unconscious manipulation of the data. I coded and transcribed all 21 months of Case B first because, as the smallest case, this provided the opportunity to easily adjust the database formatting until it best met the needs of this

study. Next, I coded and transcribed all 21 months of Case A. A total of 12 months of data for Case C, spread throughout the entire sampling period, were ultimately coded and transcribed due to data saturation. Data saturation was reached when no additional themes or new analytical data were emerging from the coding. My committee agreed that 12 months of coded Case C data sets that encompassed the beginning, middle, and end of the sampling period would suffice for analysis of the research questions and to confirm the identified patterns when combined with the data from the other two cases.

Coding Round 1

In the first round of coding, I applied values coding with a priori codes. Values coding was chosen because as it is ideal for capturing the beliefs and attitudes of the participants from their own perspective (Saldaña, 2013, pp. 110-111). The a priori codes for this phase were based on the ideological spectrum presented in Chapter 3. The codebook for this phase initially contained seven codes (see Table 1).

Two in vivo codes were ultimately added to this Islamic ideology coding structure: neutral (N) and Islamic art/culture (IA). The neutral code was added because it quickly became apparent that there was a need to identify and categorize those posts that were ideological in nature but did not contain a specific ideological orientation. I commonly used this code for religious quotes from the Qur'an and for common duas, such as the morning prayer or a prayer for forgiveness. I used the Islamic art and culture code to categorize mainly images of Islamic culture and art that were not ideological in nature, such as images of mosques or Arabic calligraphy art.

Table 1

Initial A Priori Code

Themes	Codes	Definition	Case Examples
Authoritarian Secularist	AS	Secular state is dominant; violence used to maintain power of state; Islam hierarchal structures may be co-opted to aid in the retention of state power; pictures or text of extreme authoritarian secular governments	Images of Nazi Germany; Expressed admiration for Hitler
Liberal Secularist	LS	Liberal interpretation of Islam; gender roles are equal, confines religion to the home; promotes secular law and government	No examples found in case data
Modernist	M	Attempts to balance Islamic values with modern realities; gender roles are equal, focused on social and welfare activism; belief that Islamic law should be updated to conform with the modern state	Reexamination of the Hadith and Qur'an references to argue that secular music is not necessarily Haram
Revivalist	R	Conservative-centrist ideologically; politically moderate; interested in "reviving" the culture of Islam and defending cultural heritage; Promotes return to traditional gender roles but with modern perspective	Statement that Muslim men should stand when a woman enters the room as the Prophet did for his daughter
Traditionalist	T	Adopts personal conservative interpretation of Islam based on historic traditions; politically conservative; focused on implementing historic cultural and religious aspects of Islam	Image of a very young girl in a niqab
Scriptural Fundamentalist	SF	Ultra-conservative Islam; Adopts conservative reading of Sharia; politically very conservatism with elements of extremism but lacking commitment to violently create Islamic state; may become members of restrictive communities	Picture of large pie of cigarettes and alcohol being burned; Discussion about role in establishing a new Caliphate (no mention of violence)
Radical Fundamentalist	RF	Ultra-conservative Islam; ultra conservative politically with elements of extremism to include goals of establishing ideologically based government; committed to violently destroying secular government; Ultra-Conservative & literal interpretation of Sharia	Expressing desire to marry mujahideen, Pictures of Taliban convoy, Statement about Islam being a "religion of justice" that needs to defend and avenge itself

I examined the archived blog posts and assigned a single values code to each entry as applicable, using the definitions in Table 1 to guide the process. Those blog entries that did not fit into these ideological definitions were left un-coded in the first round, such as landscape images and non-Islamic social activism posts. Each of the three cases provided unique challenges in the assignment of the first round values codes. For example, Case A often added hashtags such as #jihad or #ISIS to her posts, even if the tie-in to a radical fundamentalist ideology was not readily apparent. Hashtags in Tumblr link posts within the blog; for example, clicking on the #jihad hashtag would bring up an internet page with a consolidated list of every single post the case author had marked with this hashtag. Case B heavily relied on apparently innocuous religious quotes that then required the review of the quote's source in order to assign an appropriate values code. The posts in Case C required nuanced reading to decipher and code the often subtle delineation between pro-Palestinian activism, support for Hamas, and anti-Semitism.

Because of the wide variety in the number of monthly blog posts both within and across the cases, I had to adjust the analysis measure. I converted the assessed codes into a percentage of the total instead of using raw data numbers. These percentages created a common scale in which to compare the data from month to month and from case to case.

The original data analysis proposal in Chapter 3 was to use mind maps to consolidate the ideological data once it had been coded. However, this proved to be unfeasible, as the mind maps did not provide a single graphic with a clear visualization of the ideological data for each case. Therefore, ideological column graphs were substituted for the ideological mind maps (see Figure 3, Figure 4, and Figure 5).

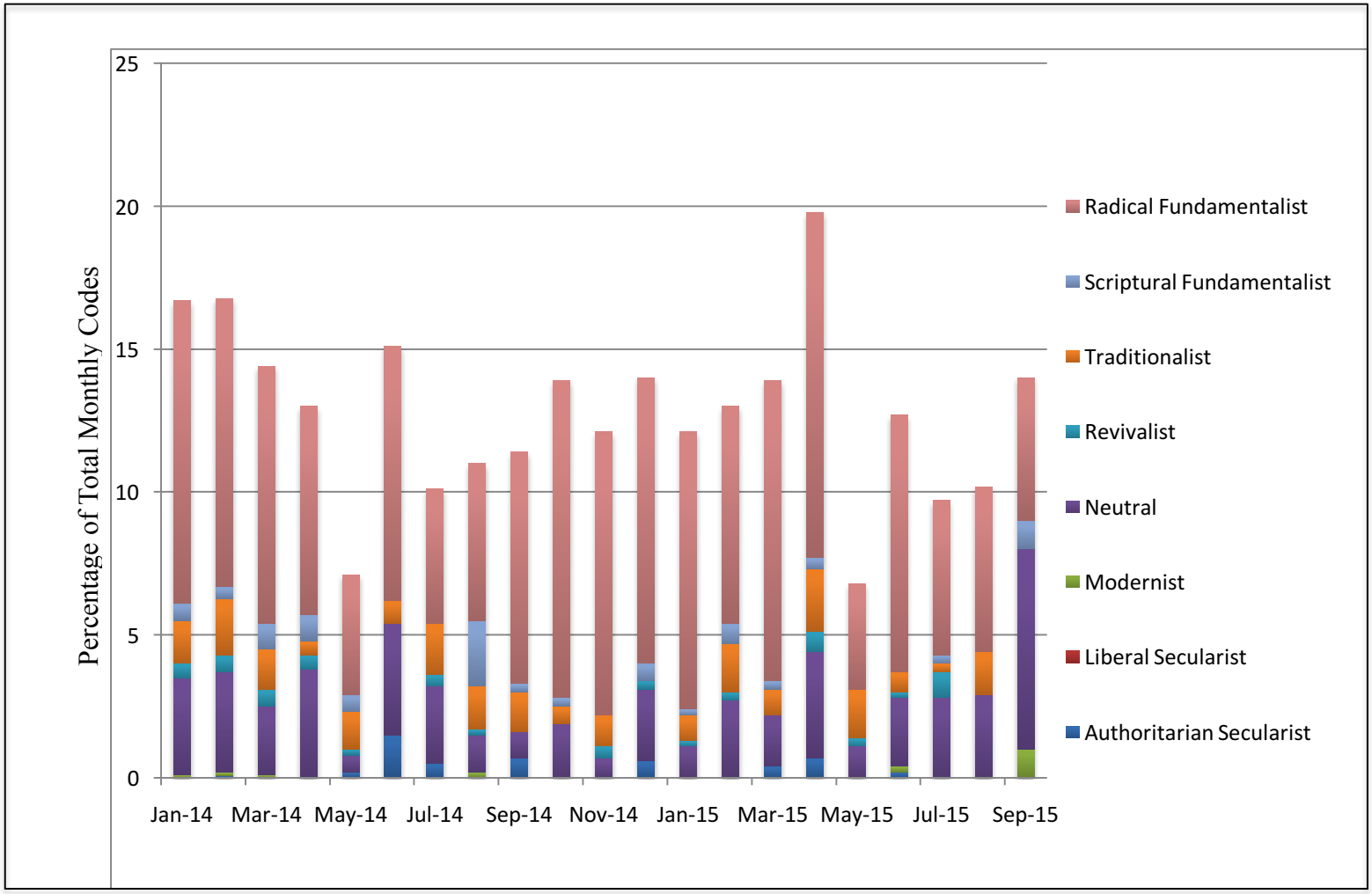

Figure 3. Column graph of the percentage of ideological coded posts for each month of the sampled period for Case A.

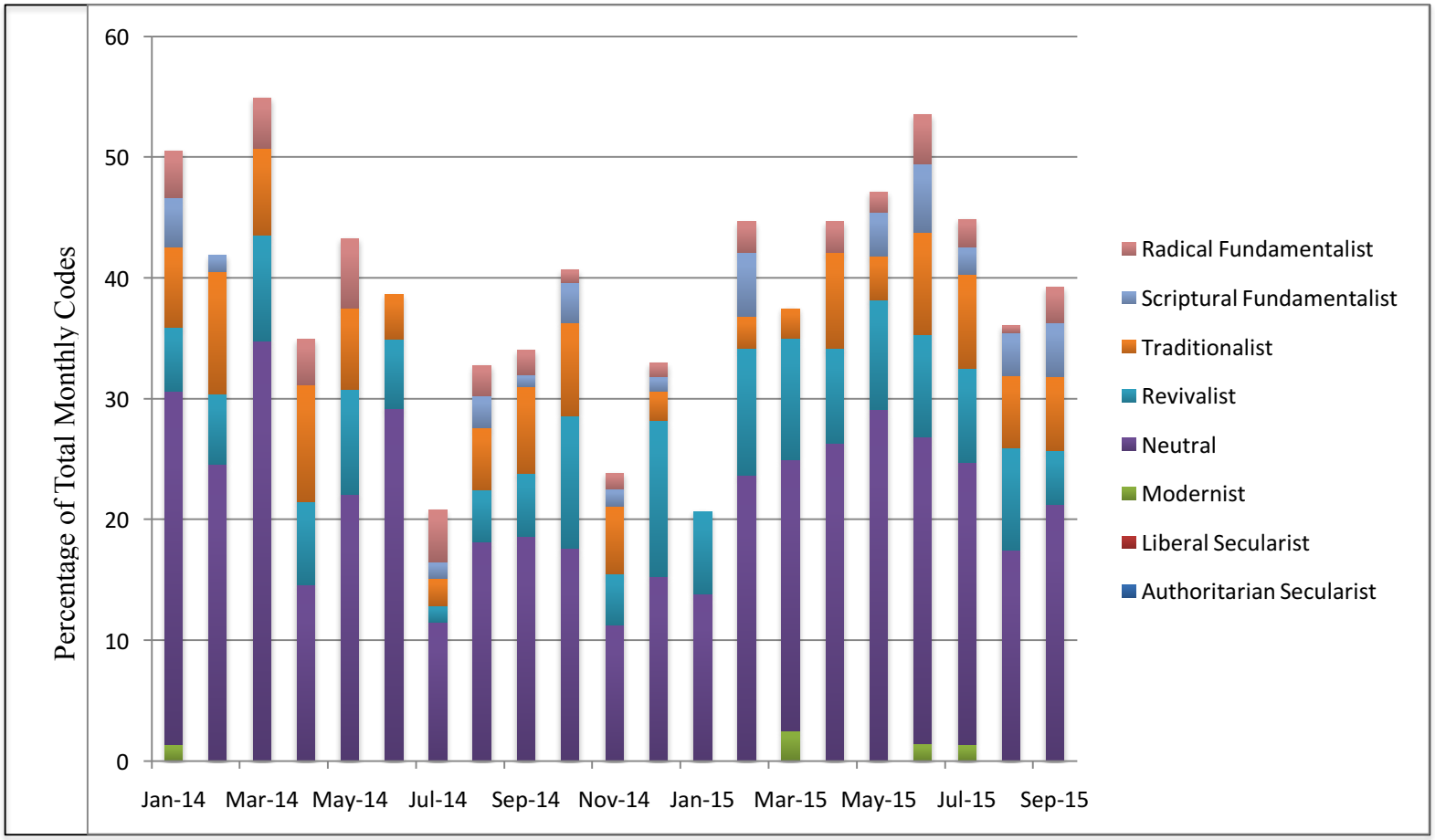

Figure 4. Column graph of the percentage of ideological coded posts for each month of the sampled period for Case B.

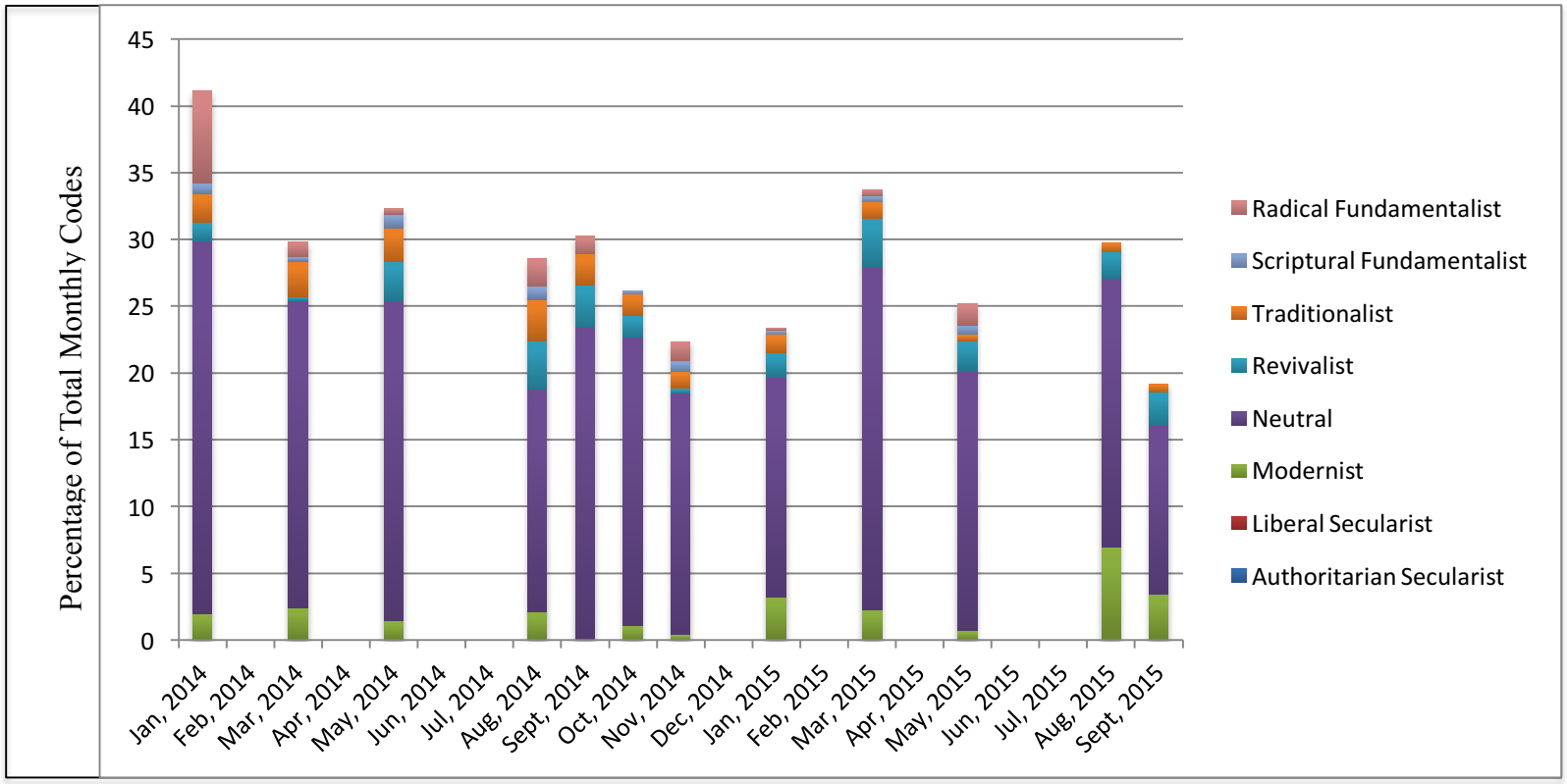

Figure 5. Column graph of the percentage of ideological coded posts for each month of the sampled period for Case C.

As can be seen in these three graphs, the ideological percentages did not present as a stereotypical bell curve, which is consistent with the nonlinear and uneven progression of radicalization noted by Silber and Bhatt (2007). However, despite the constant rises and falls in the percentage of radicalized postings over the 21 month sampling period, Case A and Case B both demonstrated a slow increase towards the right, more conservative side of the ideological spectrum used in this study (see Figure 1). For Case A, the total conservative ideological spectrum percentage of postings rose from a high of 13.3% in January 2014 to a new high of 15.4% in April 2015. For Case B, the total conservative ideological spectrum percentage of postings rose from a high of 23.1% in October 2014 to a new high of 26.8% in June 2015.

Case C did not present the same overall ideological increase between 2014 and 2015. This may be due to Case C being more centrist orientated on the ideological spectrum during the sampling period than the other two cases. However, a subtle ideological shift towards the conservative half of the spectrum can be seen in Case C by examining the percentages of the revivalist code, which occurred an average of 1.93% during the coded 2014 data and an average of 2.44% during the coded 2015 data, which is consistent with the less progressed degree of radicalization that the blog displayed in comparison to the other two cases. It should be noted that Case C had decreases in the percentages of radical fundamentalist and scriptural fundamentalist postings for 2015 as compared to 2014 even as her overall rate of conservative ideological spectrum postings were rising. Further extension of this study is needed in the future to see if this trend held

or if this data merely represents another regular fluctuation on the path towards increased ideological fundamentalism.

Coding Round 2

The second round of coding utilized focused coding in conjunction with in vivo coding. Saldaña (2013) recommended focused coding for situations when the researcher is attempting to identify the major themes within the data. In vivo coding methods were used to organically derive the focused codes based on the research questions and my observations of the data during the data collection phase and the initial phase of coding. The original iteration of the focused in vivo codes for this phase included 11 codes (see Table 2). Five additional in vivo codes were added as new patterns emerged (see Table 3).

Of particular note among the five additional codes are the anti-Semitism code, the mujahideen with cats code, and the mujahideen in acts of kindness code. The anti-Semitism code arose from a need, as previously mentioned, to distinguish between posts that are supportive of Palestinian terrorist organizations such as Hamas and those that are generally anti-Israel. This was an especially important distinction for Case C. The two codes of mujahideen with cats and acting with kindness were a subset coding that coexisted with radical fundamentalist ideological coding but occurred often enough in Case A to require a specific categorization.

Table 2

Original In Vivo Code

Themes	Codes	Description	Case Examples
Social Immaturity	SI	Apparent incongruence of topic with the age of the case author	My Little Pony imagery
Activism	A	Professed dedication to a social, political, or environmental cause	Support for Animal Liberation Front (ALF) Support for Black Lives Matter movement
Lone Wolf Imagery	LWI	Text about, imagery of, or identification with a single wolf	Describing one's self as "lone wolf Pictures of a single wolf howling at the moon
Digital Community	DC	Sentiments of friendship or social connection with followers; reliance on relationship with followers; seeking support for and giving support to followers; social interaction w/ others on Tumblr	Asking for support and prayers from other Tumblr users Asking personal questions, such as one's background, likes, and dislikes
Idealization	I	Idolization, romanticism, and preoccupation with ideas of falling in love, weddings, and marriage	Images of elaborate wedding gowns Poetry about being in love with a spiritually tortured jihadist despite the danger
Escapism	E	Images or language that appear to symbolize a desire to travel or get away from daily life	Images of the view out airplane windows
Mental Health	MH	Discussion of emotional and psychological well-being	Statement about self-hatred Statement about feeling depressed and lonely
Relationship with Family	F	Discussion of relationship with family members	Statement about father being a drunk that "truly thinks that I am stupid"
Weapons/Violence	W	Discussion, text, or pictures of weaponry and/or violence that are not specifically tied to an ideological or political cause	Image of ammunition and assault rifle laid out in the pattern of a heart
Self-Reflection	SR	Self-perception; identity, personal introspection	Self-reflection about the benefits of choosing to become a reclusive person Original poetry about needing to be more humble Reflection on recognizing the dichotomy in self of wanting to be part of violence yet also avoiding conflict
Gender Roles	GR	Roles of men versus women in society, the workplace, the house, and public interactions between men and women; responsibilities of each gender	Advice to Muslim women to ensure their marriage contracts defines that they will be treated with honor and dignity

Table 3

In Vivo Code Additions

Themes	Codes	Description	Case Examples
Unsubstantiated Claims	UC	Assertions made without credible supporting evidence	Statement about being involved with the rescue of SSgt Bergdahl
Anti-Semitism	AZ	Anti-Semitic rhetoric, images, videos, and discussions	Referring to Israelis as "lower in scum" "Do pigs fly? Yeah, Israel has an airforce."
Anti-United States	AU	Anti US rhetoric, images, videos, and discussions	Referencing President Obama as the "Imperialist in Chief" Video of Iraqi boy calling Americans "scum" and "animals" "How is it like living in a country run by a terror group" I wouldn't know I don't live in America"
Mujahideen with Cats	MC	Discussion, text, or pictures of mujahideen caring for, cuddling, interacting in a positive manner with cats	Image of armed mujahideen petting, playing, and feeding kittens
Mujahideen in Acts of Kindness	MK	Discussion, text, or pictures of mujahideen acting in a manner that denotes kindness, compassion, charity, and social outreach	Image of armed mujahideen playing soccer with young boys

Coding Round 3

In the third and final round of coding for this study, I again utilized focused coding, concentrating solely on two a priori codes: evidence of social learning and evidence of Islamic sisterhood. This coding phase involved highlighting direct examples of social learning and digital expression of Islamic Sisterhood. Evidence of social learning flowed both from the case author and back to the case author, and included several different iterations, including approval and admiration of the case authors' posts by other users, advice both offered and given, and encouragement to post more on specific topics. Examples of the variety of social learning identified in this study included Case A being told the reader "loves her blog so much," Case B describing how she was

inspired and reminded of her relationship with Allah from another person's religious reflection on a hadith about the moon, and Case C being asked for advice on how to handle wearing a hijab for the first time around nonsupportive friends. Islamic sisterhood included the verbalization or demonstration of a connection among Muslim women despite physical separation. For example, Case C regularly praised other Muslim women, describing them as "the strongest, kindest, most intelligent demographic out there" and verbally defending other Muslim women she felt were being emotionally attacked on Tumblr.

Analysis Process

Once the data were coded and entered into the database, I moved onto code and direct observation analysis. First, I programed functions into the data sheets to provide total counts of the occurrence of each code for each month (see Figure 6).

Code	Appears	Appears	Appears	TOTALS
A	129	19	4	152
AS	0	0	0	0
AU	8	6	1	15
AZ	8	4	1	13
DC	59	28	3	90
E	13	1	0	14
F	2	0	0	2
GR	25	14	1	40
I	14	1	1	16
IA	149	48	0	197
LS	0	0	0	0
LWI	0	0	0	0
M	31	1	0	32
MC	0	0	0	0
MH	13	2	0	15
MK	0	0	0	0
N	390	63	3	456
P	1	0	0	1
R	21	2	0	23
RF	9	3	0	12
SF	13	0	0	13
SI	14	3	0	17
SR	5	2	0	7
T	32	2	0	34
UC	4	2	0	6
W	0	1	0	1
TOTAL CODES	940	202	14	1156

Figure 6. Example of total counts tables created for each monthly data set, detailing how many times each code appeared in the month; example from Case C, January 2014.

The next step in the analysis process involved computing the percentages of occurrence for each of the ideological codes. I also isolated the blog posts that were on the conservative side of the ideological spectrum and averaged out the number of times other Tumblr users interacted with those posts. Finally, these different elements were plotted on line graphs for comparison, which are presented in a later subsection of this chapter.

Once I had finished with the ideological analysis, I moved on to the thematic analysis. I followed a similar process to the ideological analysis, identifying codes that were important to all three cases, such as activism, as well as cases that were crucial for a specific case, such as mujahideen with cats for Case A and anti-Semitism for Case C, computing the percentages where required, plotting the data onto to line graphs for comparison when appropriate, and accomplishing a direct analysis of selected posts to further analyze specific themes.

Thematic codes that were not applicable to at least two of the three cases were taken out of pattern analysis consideration, although I still used them during direct post analysis as applicable. For example, Case A posted a great deal of about her mental status and her own depression but this pattern was not seen across the other two cases. Case C was very critical of both Israel and the United States, but again, this was not observed very often in the other two cases.

The final step in the analysis process was to review the field notes and researcher observations in the context of the narrative portions of the databases. The impressions and interpretations I developed during this step were placed within the context of the graphed analysis in order to develop deeper insight into the research questions.

Evidence of Trustworthiness

Credibility, transferability, dependability, and confirmability strategies were utilized throughout the entire data collection and analysis process to ensure the trustworthiness of the analysis. Establishing the trustworthiness of the data collection and analysis processes was crucial to ensuring the quality of this research.

As described in Chapter 3, I established credibility for this study through the use of triangulation, or the use of multiple sources that included the archival blog records, researcher observations, and the field notes. I maintained prolonged contact with the data sources through the archival feature of the cases; this allowed me to collect 21 months of data for each case and to access the entire case history to establish background information.

I established transferability for this study through transparency in the methodology, data collection, and data analysis process. I used detailed and comprehensive descriptions to create a research road map so that other researchers can evaluate the potential applicability of this study to their own (Creswell, 2013; Yin, 2014). My use of purposeful sampling for case location variety within the targeted phenomenon also increased the transferability. The original plan presented in Chapter 3 had been to choose blogs written by women from three different countries, but this proved difficult to confirm due to the narrow age range for this study and the unexpected recalcitrance of blog authors to reveal personal data if they were more advanced towards the conservative side of the ideological spectrum. However, I found that the lack of a specific country of origin for Case A and Case B mitigated national stereotypes while Case C's dual national ties to both Canada and to South Africa widened the transferability of the this study beyond the blog's specific country of origin. Therefore, transferability through variety in case author origin was obtained even if it was not quite as I originally envisioned.

Dependability for this study was established in three ways. First, as with credibility requirements, triangulation of data enhanced the dependability of the study.

Second, as with transferability, I made concerted efforts to be as transparent and detailed as possible in describing the data collection and analysis process so that other researchers can assess and replicate the process used for this study. Finally, the data were arranged into a case study database so that the analysis process could be reviewed and verified at any point (Yin, 2014). Originally, I planned on using word documents for this database, but the amount of data accumulated in the collection process was significantly larger than originally expected and Microsoft Excel proved to be a more efficient and useful format.

My confirmability strategy centered on consciously maintaining objectivity and moral neutrality throughout the collection and analysis phases despite the extremist views sometimes expressed in the blogs. The only time this objectivity was difficult to maintain was when I was confronted with some posts by Case A that challenged my stated assumption of accepting the blog posts as a truthful representation by the case author. For example, at one point Case A posted several entries asserting that she had been instrumental in the negotiations for the release of Army Staff Sergeant Bowe Bergdahl from the Taliban and that the United States had gotten the idea from her because they had tapped her phone lines while she was negotiating with key individuals in Pakistan through her own personal network of acquaintances. I struggled with this stream of posts because it seemed unlikely that a 19 year old Islamic revert university student in a Western country would have the ability and connections to easily telephone key Taliban leadership yet I could not just dismiss these claims without risking imposing a values judgment. After some reflection on the matter, I realized that I had to assume that the case author believed this to be her own truth but that I could recognize it as unverified.

This directly led to the code of unsubstantiated claims and allowed me to objectively mark those posts that lacked sources without making a moral judgment.

Results

In this section, I will present the qualitative findings, results, and themes of the data analysis of the three cases presented in this study. For the main research question and the two subquestions, I will discuss the results of each case analysis, examine the findings based on the combined results from each case, and assess the emergent themes. Any discrepancies will also be presented.

Main Research Question

The central research question for this study was: In what ways could an online blog about Islamic self-realization written by a Western female convert create a potential vulnerability for exploitation by a fundamentalist Islamic organization? I addressed this question by examining the data for common themes that may act as markers or identifiers for those searching on social media for potential targets for radicalization and then assessing how those themes could be exploited. Data used to answer this research question was obtained from the coded archive data, my observations as the researcher, and my field notes. Overall, the data indicated that fervent activism, dedication to a digital community, and tepid responses to world terror attacks may all create potential exploitation vulnerabilities.

Fervent activism. The most prevalent theme that emerged from all three cases was a high degree of activism displayed by all three case authors. All three case authors posted and participated in multiple posts each month on various socio-political issues.

Case A generally dedicated between 2-5% of the total posts per month to activism concerns, spiking as high as 7.7%. Case B dedicated between 5-9% of the total posts per month to activism, peaking at 22.1%. Case C was the most socio-politically active, usually dedicating between 18-22% of her total monthly posts to activism with a peak of 28.9% during the sampling period.

There was some variance among the specific socio-political causes that each case author championed. Case A was focused on animal rights issues while Case C concentrated on racial equality and gender equality. Both Case B and Case C posted regularly about Palestinian disputes yet Case A spoke out very little on this topic. However, the plight of Syrian refugees, Guantanamo Bay prisoner concerns, and complaints against the United States' drone program were commonalities among all three cases.

A key aspect of this socio-political activism was the fervent and extremist nature of it. I described it in my field notes as "the black and white aspect" and noted that none of the three case authors exhibited a sense of moderation in their socio-political beliefs. All three case authors gave no indication that they were aware of or accepted the existence of the variety of complex factors involved in most socio-political concerns. For example, in pursuit of animal rights, Case A supported the Animal Liberation Front (ALF). She posted imagery of ALF's armed members breaking into facilities, and praised them for the use of force in support of their organizational goals: "ALF aren't terrorists. They're freedom fighters and I'm with them til my death." Case B posted calls for protestors around the world to march into Gaza and "liberate" the Palestinians and

reblogged sharp criticism of all American citizens for being willfully "ignorant" about drone attacks. Case C exhibited a broad range of socio-political causes, but particularly emphasized gender equality, racial equality, and the Palestinian state. Like Case A and Case B, Case C was devoted to each cause with strident fervor. She raged at Israel, any other state that recognizes "the Zionist state," and the media for its bias: "When there is 'calm' in Palestine, fishermen are shot at, children are run over, land is stolen and homes are bulldozed. The media says nothing because 'calm' for Israelis is all that matters." She lent tacit support to reprisal violence in cases of domestic abuse by reblogging statistics discussing the incarceration rates for women accused of killing their abusive husbands and images of India's Gulabi gang women that beat accused abusive husbands; she damned the police, the government, the media and even Disney for the United States' racial tension woes.

This strain of fervent activism creates a potential vulnerability that could be exploited because it indicates that the case authors may be willing to commit to a cause with fanatical zeal. The extreme "right" and extreme "wrong" of the activist approach displayed by each case author could be seen as being compatible with the ideological approach of fundamentalist Islamic organizations that utilize a "good" versus "evil" stratagem. Each of the case authors demonstrated that they were willing to pledge themselves to an uncompromising position that could be exploited and re-directed towards a radicalization ideology instead. The socio-political issues that the three cases had in common are also a potential vulnerability factor. The Syrian refugee crisis, Guantanamo Bay detainees, and the United States' drone bombing program all involved

actions against Muslim people and may further indicate susceptibility based on mutual cultural sympathies and expressed anti-American and anti-European sentiments.

Digital community. A crucial element of social media is the creation of a digital community that becomes as real and as important as the physical community. All three cases demonstrated interaction with other Tumblr users through commentary on posts as well as answering reader questions; however, the digital community aspect was strongest with Case A and Case C. Case B, as noted in the description above, did not interact with her readers with anywhere near as much regularity and frequency as the other two cases. Case B is therefore excluded from this section of analysis as a discrepancy.

Case A interacted habitually with the followers of her Tumblr blog. Through devices such as soliciting and answering questions, arguments over points of Islamic law, offering advice, and private joke references, Case A had as high as a third of her monthly posts include an element of direct reader interactions. She appears to have answered and posted for public viewing almost all questions she received, to include the anonymous ones, and even if her response was only an irritated "STAAAAP" or an image of a My Little Pony cartoon. In my field notes, I described her responses as "wildly variant." She sometimes responded with effusive sentiments of affection for her readers: "you're a sweetyheart and I love you for the sake of Allah SWT soooo much and I ask Him to bless you and reward you 1000000000xemiiiiiiiin." Other times, she answered with sullenness and hostility: "what in the absolute hell is your problem?" She offered support for other reverts and those struggling with mental health problems; she lectured posters about their use of specific ideological vocabulary nuances: "Jihadi isn't a real word" and whether or

not rap music is haram; she answered niqab logistical questions such as "drinking orange juice and fortified soymilk helps me get vitamin D;" and she railed against those who accused her of violence and supporting ISIS despite her posted images of ISIS members and discussions about decapitation and executions. The dynamic between Case A and her Tumblr readers mirrored the ups and downs of physical relationships because, as she said, she had no friends in the physical world and this digital community represented her entire social circle.

Case C was also very active with her digital community, with reader interactions comprising as much as a fifth of her total posts some months. Case C demonstrated a more even relationship with her readers, usually one of mutual admiration, such as praising each other's' inner and outer beauty and expressions of admiration for each other's' blogs. Like Case A, Case C often took the role of educator to others, answering questions about Islam as well as her favorite causes. She fielded questions as diverse as requests for recommendations on nasheeds to listen to, queries about environmental racism, whether or not celebrating the Prophet's birthday was haram, and where she buys her abayas. Not all of her interactions with readers were pleasant, though. As with Case A, Case C did not hesitate to demonstrate a forceful opinion and argued back with those who contradicted her. For example, during a heated exchange with another Tumblr user about homosexuality and Islam, she told the other user he was "ignorant" for refusing to agree with her about Islam needing to accept homosexuality as normal and then complained, "who knew being nice to gay people was such a controversial idea." Unlike Case A, though, Case C did not cross the line into open hostility and aggression despite

often being frustrated by what she perceived as assumptions made about herself as a "white revert." She felt that it was "rude to question" her all of the time about her faith and beliefs. A unique element to Case C's digital community was that she allowed it to collide with her physical community and developed physical friendships with a few of her Tumblr users. This included meeting up with one at a conference, getting together to socialize with two others, and even becoming the roommate of one. For Case C, the barriers between her digital community and her physical community were porous.

Both Case A and Case C were fiercely protective of other Muslim women on Tumblr. Case C, for example, told a Tumblr user who was questioning a Muslim woman's wearing of skinny jeans that this was "none of your business" and that the user "should go pray for forgiveness" for asking such a question. Case A took it one step further and sometimes invoked violence, such as stating that a man pretending to be a Muslim woman on Instagram to get pictures of Muslim women without their veil "should be locked in a cage and burned."

The sustainment and regular participation in a digital community may have created vulnerability for targeted radicalization attempts by inviting unknown people into their lives and developing digital relationships with them that became as strong as physical relationships. Both Case A and Case developed real attachments, feelings of loyalty, and an ongoing connection with their readers, the vast majority of which they never met in person and with whom there was no physical social accountability. These associations were built on a platform that encourages its contributors to discard their privacy and present their digital relationships for public examination. The details of these

interactions revealed important data points about the case authors and about their social network for any individual wishing to target these case authors for radicalization by copying the same patterns. The close relationship Case A and Case C developed with their readers left them potentially vulnerable to anyone who was savvy enough to prey on their sympathies and kindle their loyalties.

Tepid responses to world terror events. During data collection, two significant world terror events took place. In November 2015, Paris, France suffered a wave of coordinated terrorist attacks. Four months later in March 2016, Brussels, Belgium similarly suffered a coordinated series of terrorist attacks. ISIS claimed responsibility for both of these events. To capture the reaction of the case authors to these real-time events, I conducted an observation of all three cases' posts one week after the Paris attack and again one week after the Brussels attack.

Case A was uncharacteristically silent about both of the attacks on her blog, especially since she has openly expressed sympathy with ISIS's ideological cause yet also condemned violence towards the innocent. After the Paris attack, she made one post about a terrorist attack in Lebanon being ignored while the media concentrated on Paris. Case A made no comments at all about the Brussels attack.

Case B posted nothing, direct or inferred, about either the Paris attack or the Brussels attack. While Case B was the least prolific blogger overall, the lack of any commentary about significant world events that involved Muslim was an anomaly.

Unlike the other two cases, Case C posted more than 30 posts about the Paris attack in the week after it, including a single post condemning ISIS. However, few of

these posts were about the attack or the first level victims. Instead, these posts focused almost exclusively on preemptive concern for Muslims who might be the targets of post-attack Islamophobia in France, Canada, and the United States. She also increased her political commentary on the Syrian refugee crisis and how this attack would affect the Syrian refugees currently trying to enter Europe. After the Brussels attack, Case C changed her pattern somewhat and was uncharacteristically silent on the topic. She posted nothing about the bombing, instead posting only about her usual socio-political cause of racial inequality and her own feelings about university classes.

The response of all three cases to the terror attacks in Paris and Brussels were a break in each case author's posting patterns and may indicate a vulnerability for targeted radicalization attempts. By failing to condemn the attack or even address it, Case A and Case B could have been perceived to be sympathetic to the bombers. Case C's single weak condemnation of ISIS, heavy focus on potential indirect Muslim victims, and then lack of social media response to the Brussels attack could have been perceived as being ambivalent and even potentially receptive to changing her stance. If the three case authors had not been socio-politically active, especially for Islam-related issues, their silence on the attacks would have been unremarkable. However, the change in posting pattern was very noticeable and may have indicated susceptibility for targeted radicalization efforts.

Overall, three themes emerged across the cases that may indicate potential vulnerabilities to targeted radicalization attempts by Islamic fundamentalist organizations. A high rate of socio-political activism with a strain of extremism was detected in all three cases. This activism may indicate that the case authors are willing to

become fervent supporters of a cause and are possibly recruitable to specific socio-political agendas. Second, a strong digital community, such as Case A and Case C have built, may leave the case authors vulnerable to those who are able to infiltrate this network, build a relationship, and then exploit the case authors' sense of commitment, loyalty, and friendship. Finally, a break in posting pattern about major world events involving a fundamental Islamic organization and tepid responses to terrorist attacks may indicate the case authors are at least ambivalent about the organization and cause behind the bombings, and therefore could be susceptible to targeted attempts to increase the case authors' sympathies.

Subquestion 1

The first subquestion for this study was: How is differential reinforcement in the form of readers' interactions with the blogs appearing to influence the topic and tone of the case authors' blog entries? The data showed evidence across all three cases that suggested differential reinforcement does influence the subject and tone of the case authors' future postings. This was determined in two different ways: average note comparison and direct post analysis.

The initial method I used to examine the influence of differential reinforcement on the blog postings involved looking for patterns between the number of ideologically tied posts made each month and the average number of reader interactions those same posts received each month. First, I extrapolated the blog entries from the code database that were coded for the conservative side of the ideological spectrum. Next, I averaged the number of notes these blog entries received each month for the sampled period and

plotted the results on a line graph. I then made a second line graph of the monthly occurrence percentages for these same codes. Finally, I compared these two graphs for each case to see if indications of potential social learning could be discerned

Analyzing the graphs for Case A, I noted that the rise and fall in ideologically conservative codes generally shadowed the rise and fall of the average number of times readers interacted with these ideologically conservative codes (see Figure 7 and Figure 8). For example, as the average number of notes on the ideologically conservative posts fell in March, April, and May 2014, the case author responded by posting less of this type of blog entry. When the average notes on ideologically conservative posts rose again in July 2014, the number of ideologically conservative posts also rose in August 2014. Spikes in the average number of notes on ideologically conservative posts in September 2014, Feb 2015, and May 2015 similarly demonstrated increased ideologically conservative posts in the month following. Decreases in the average number of notes on ideologically conservative posts in April 2015 and June 2015 were followed by decreases in the number of ideologically conservative posts as well. These graphs demonstrate that when more readers interacted with her ideologically conservative posts, Case A increased the number of ideologically conservative blog entries she posted; when the average number of notes fell, Case A decreased the number of ideologically conservative blog entries she posted.

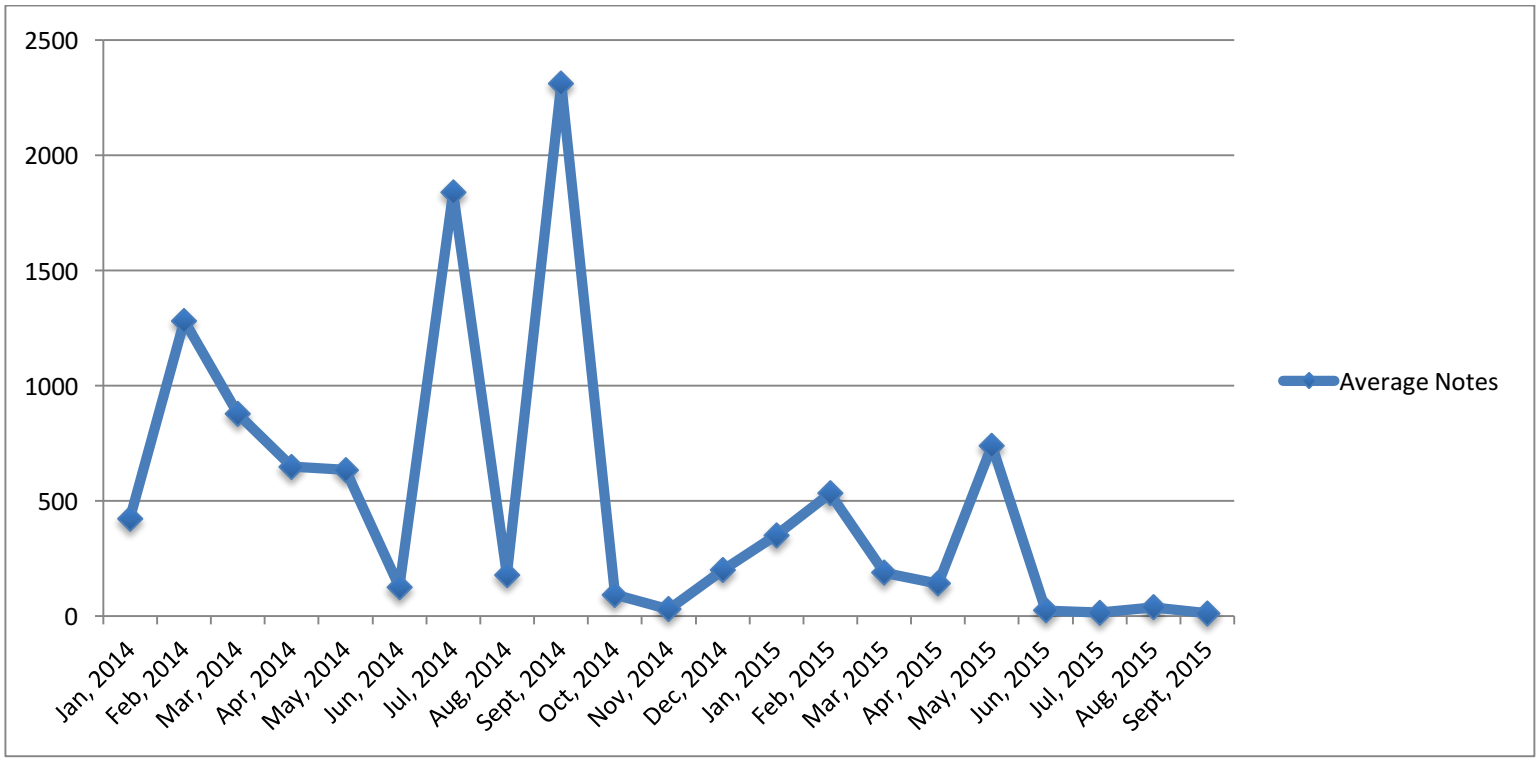

Figure 7. Graph depicts the monthly average number of notes received by the conservative ideological posts for Case A.

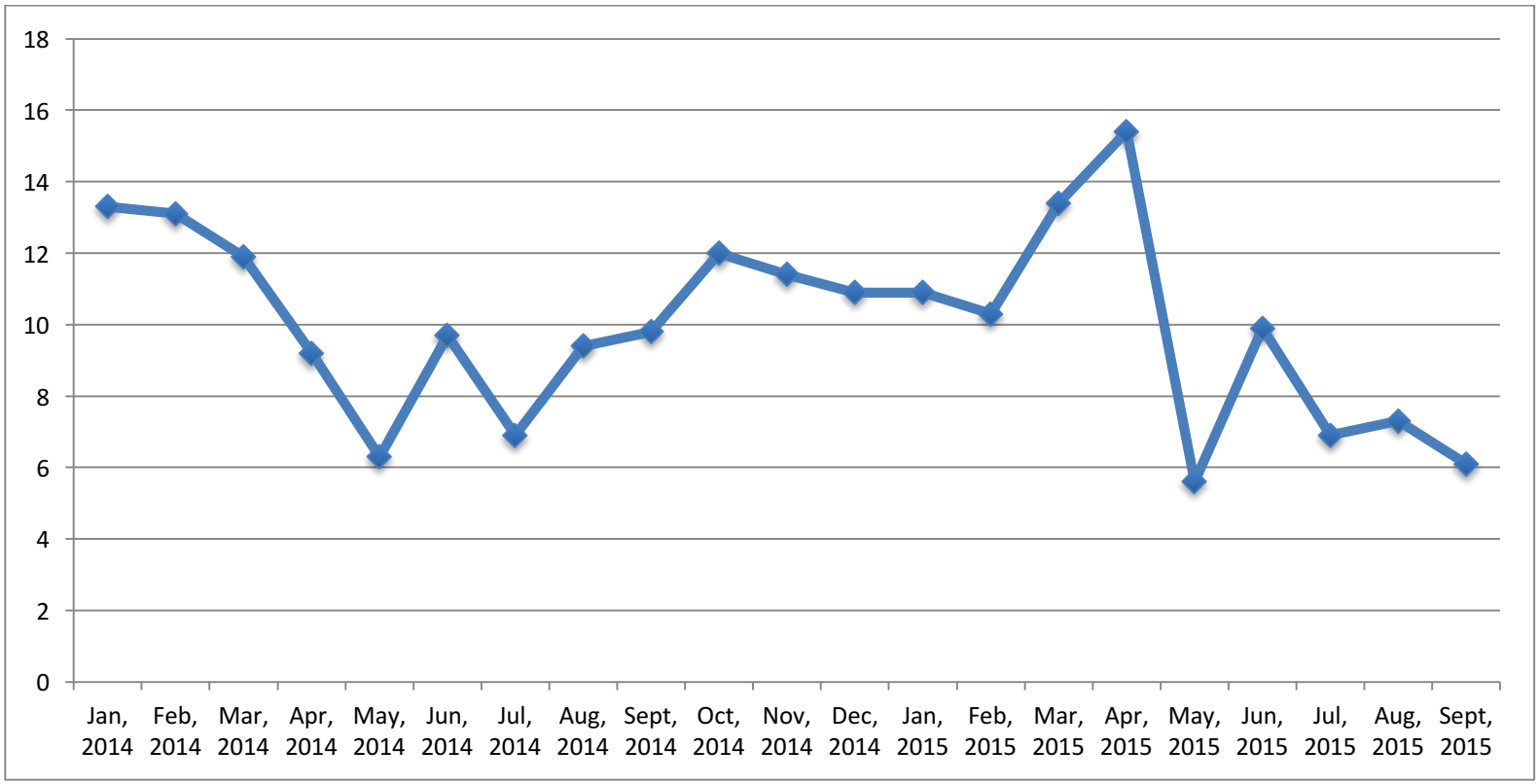

Figure 8. Graph depicts the monthly percentage of posts that were coded as ideologically conservative for Case A.

Case B demonstrated a similar trend (see Figure 9 and Figure 10). As the average number of reader interactions on ideologically conservative posts rose in April 2014, July 2014, September 2014, March through May 2015, and June 2015, the percentage of ideologically conservative posts also rose in the same or following month. When the average notes of ideologically conservative posts fell in May 2014, and October 2014, the following month had a corresponding fall in the number of ideologically conservative posts. Case B did have one minor discrepancy in that the small rise in average notes for ideologically conservative posts in December 2014 was followed by a rise in the number of ideologically conservative posts two months later instead of the pattern of the following month more commonly seen in both Case A and Case B.

Case C did not demonstrate a similar pattern of differential reinforcement for its ideologically conservative postings. This may be because, as was demonstrated in an earlier section (see Figure 5), Case C was the least extreme of the three cases on the ideological spectrum and the ideological differential learning may not yet be apparent. I therefore turned to a code that had been an indicator of Case C's ideological-political beliefs: the anti-Semitism code. I extrapolated this code from the database and repeated the process of comparing the average number of notes with the monthly percentages of code occurrence (see Figure 11 and Figure 12). While the pattern differed slightly from Case A and Case B in that rises in average notes for anti-Semitism posts were often marked by a rise that same month in the number of anti-Semitic posts, the data still appeared to indicate influence of differential reinforcement.

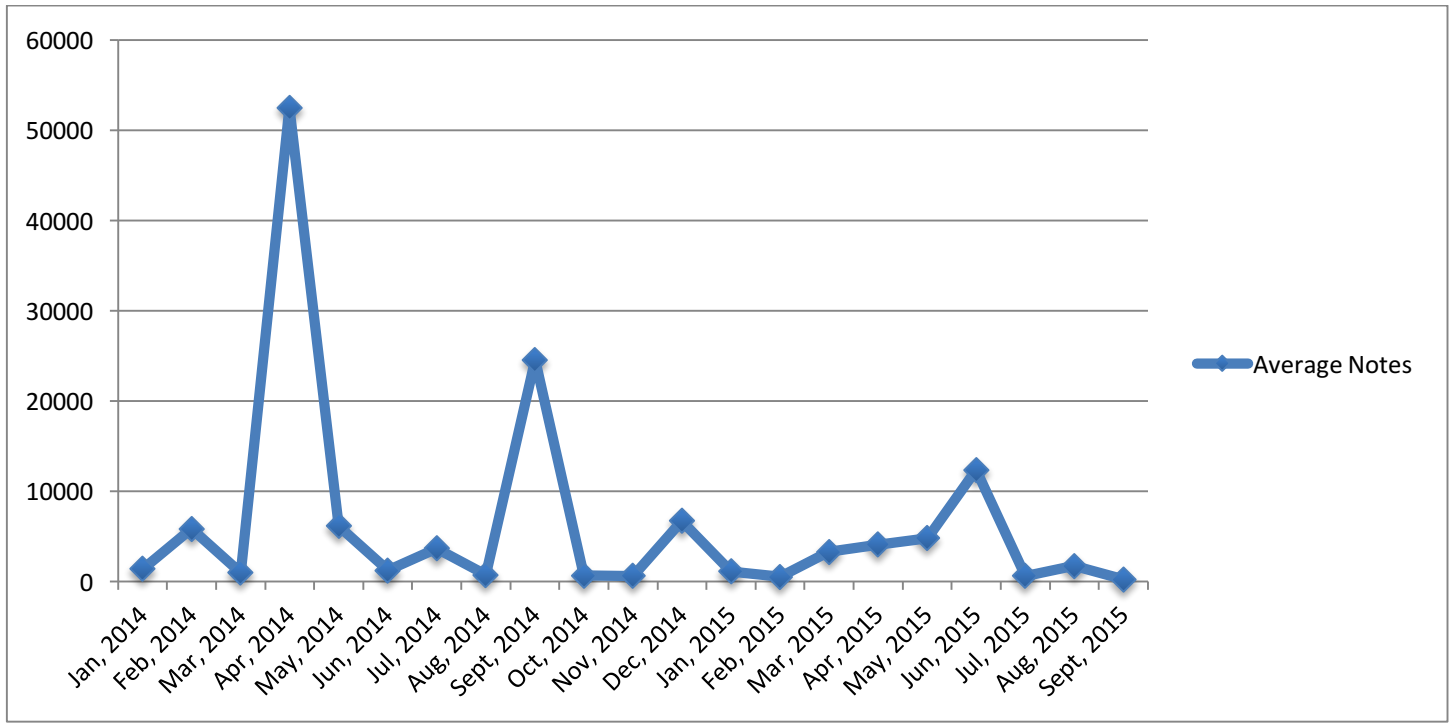

Figure 9. Graph depicts the monthly average number of notes received by the conservative ideological posts for Case B.

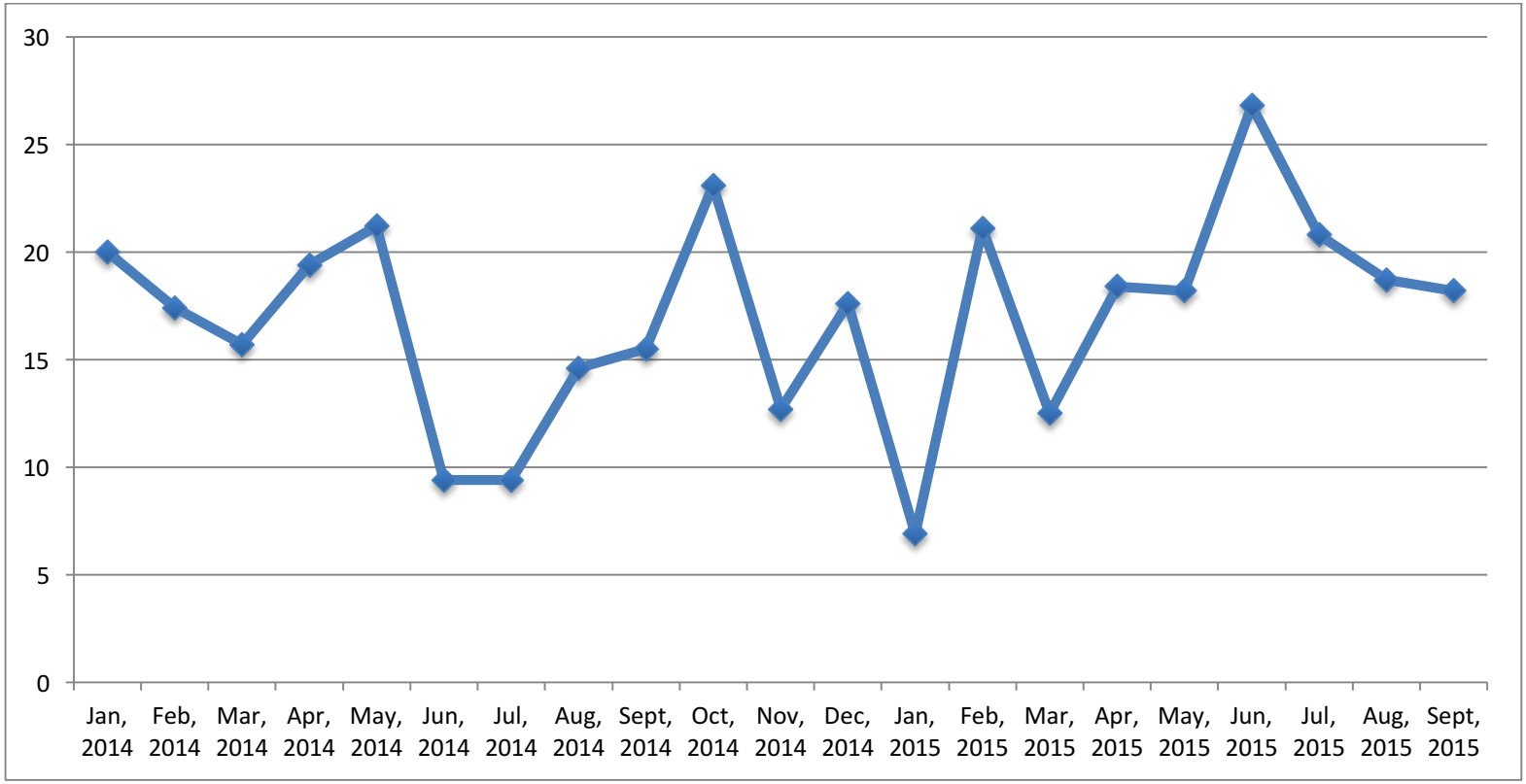

Figure 10. Graph depicts the monthly percentage of posts that were coded as ideologically conservative for Case B.

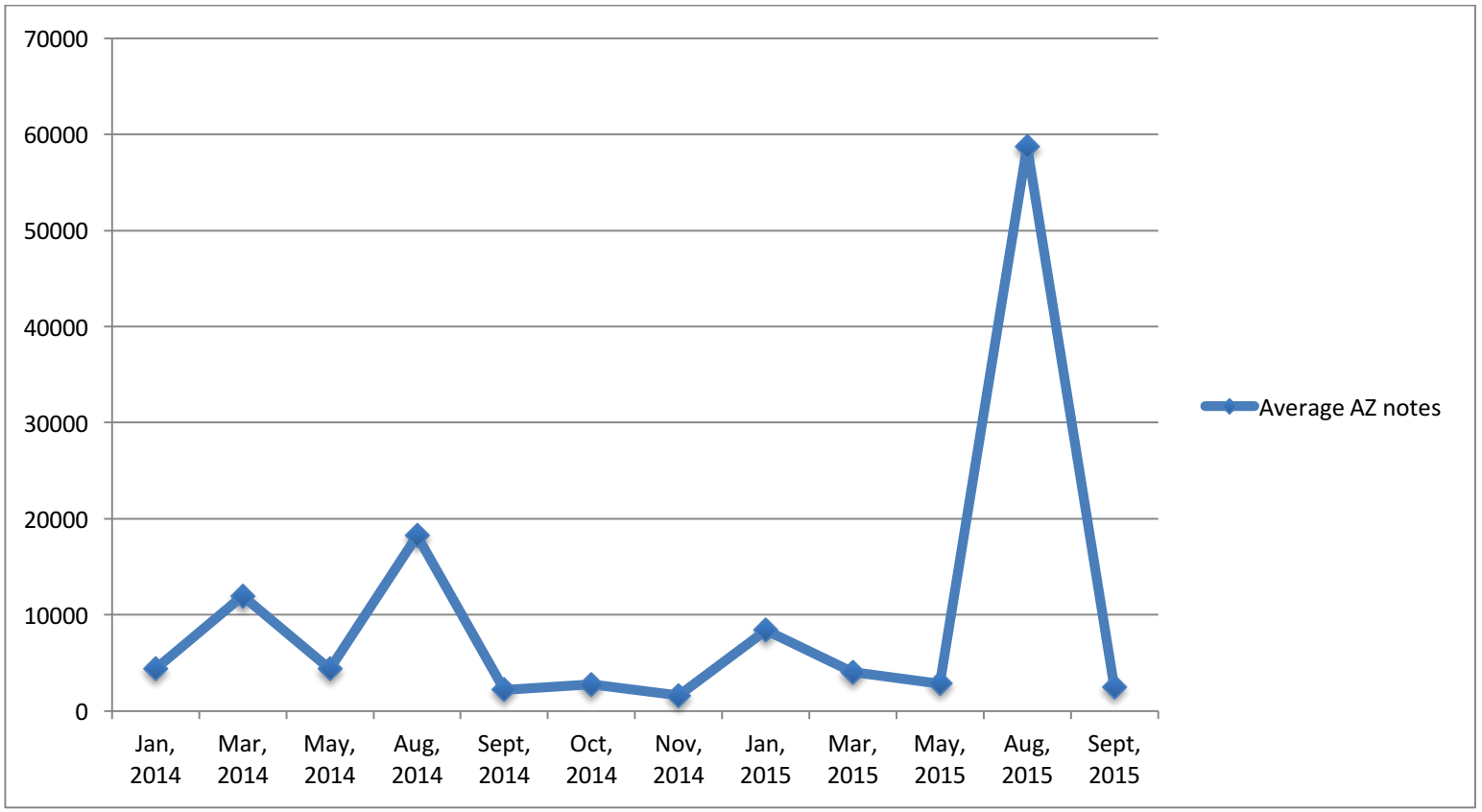

Figure 11. Graph depicts the monthly average number of notes received by the anti-Semitic coded posts for Case C.

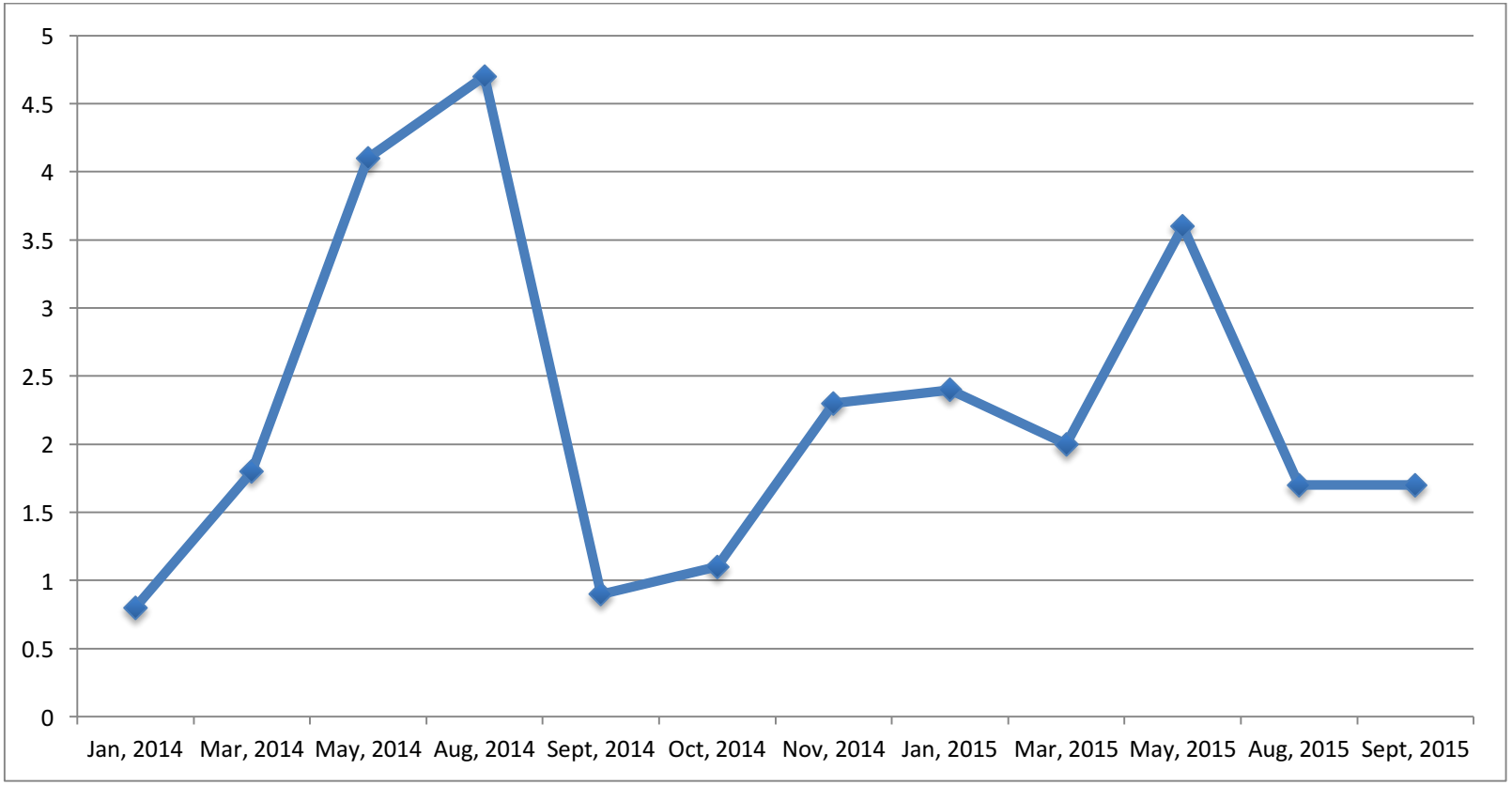

Figure 12. Graph depicts the monthly percentage of posts that were coded as anti-Semitic for Case C.

The second analysis method I used to ascertain the influence of differential reinforcement on the blog postings was direct post observation. This method required reviewing each line in the code database that had been marked in the third round of coding as an example of social learning and then analyzing later blog posts for any indication of influence.

Case A demonstrated multiple examples of differential reinforcement that could be observed directly impacting the topic and tone of her posts. For example, in October 2014, Case A was asked by another Tumblr user where she found the pictures of mujahideen playing and cuddling cats that she posted. Case A provided the other Tumblr a link to those types of pictures and that month, Case A posted the highest percentage of mujahideen and cat pictures seen in the entire sampling period, with 21.6% of the posts coded radical fundamentalist also depicting mujahideen and cats compared to the more common 7 to 8% found in the other months of the sampling period.

In February 2014, Case A was told by another Tumblr user to "keep the guns and cats coming," referring to her frequent posting of images of weaponry and images of cats, to which Case A replied with "=^.^= will do!" February 2014 then showed an increased percentage of weapons imagery compared to January 2014 and March 2014. Also in February 2014, Case A polled her readers to see if there was interest in her writing a guide on how to wear a niqab which received several affirmative answers from other Tumblr users, leading the case author to answer back "Alright then, I'm writing it now," although she did not appear to have followed through with this project.

In August 2014, a reader praised Case A's jihad and violence themed poetry and requested more, suggesting the theme of covering. The case author responded with a poem about a Muslim woman who covers and is therefore unforgettable. This same dynamic was repeated in November 2014 when the case author was asked by for a poem about a specific Taliban leader and she complied.

In March 2015, a Tumblr user told Case A "I want you to post more mujahideen" to which the case author responded with "aren't I posting enough Mujahideen already?" This was followed by a higher than average percentage of radical fundamentalist posts that month at 10.5% and in the following month, the highest percentage of radical fundamentalist posts for the entire sampling period (12.1%). These are just a few examples of the myriad of posts throughout the data for Case A that demonstrated that differential reinforcement through expressions of approval and positive queries by other Tumblr users appeared to influence the posts of the case author.

Case B did not demonstrate the same direct observations of differential reinforcement. This may be due to the less personal and more distant relationship Case B had with her readers.

Direct observation of Case C data also revealed several examples of differential reinforcement but they were subtler and less specific than those seen in Case A. For example, more than half of the coded months included sentiments from other Tumblr users expressing approval of the case author's blog, such as "I love your blog so much, I always did and always will;" I enjoy your blog;" and "I love your blog! there's moderation between the funny posts and the Islamic ones and when I come across the

Islamic post, I instantly become insaf and remember Allah." Case C usually responded with gratitude and sometimes, further expressions of pleasure, such as "you made my day" or "this was so nice." While it was difficult to ascertain if these sentiments may have influenced the specific type and tone of future posts, they do demonstrate Case C received and appreciated the approval of her readers, which may have acted as an impetus to continue the blog in its current format and focus.

More specific examples of differential reinforcement were the back and forth conversations that some of Case C's posts created. As an example, in August 2015, Case C posted commentary decrying Muslim men who actively seek out "white revert girls" to marry as a status symbol. This post thread generated an unusually high response, with 12 different commentary threads directed back to the case author from readers asking questions, arguing with her, and supporting her position. One reader told her "Gurrrrl u gained a fan here!" because Case C refused to back down on her position. The following month, the case author got into an argument with another Tumblr user over comments made by a third party trivializing the struggles of reverts to Islam. Case C showed the same force of opinion and was again rewarded with messages of support such as "he had no clue get em girl;" it therefore appeared that Case C may have learned to repeat the behavior of an aggressive response to dissenting readers over controversial topics from the differential reinforcement she had previously received.

Overall, the data overwhelming indicated through both code analysis and direct data observation that differential reinforcement influences the topic and tone of the case authors' posts in several different ways. All three cases demonstrated that an increased

number of notes on a topic was often followed by more posts of that type while declining notes on a topic led to less posts about it. Case A provided clearly defined examples of how requests for specific topics, such as pictures of mujahideen with cats and violence themed poetry, were immediately answered with more of the same. Both Case A and Case C demonstrated that expressions of approval for the overall tone and content of their blogs was incentive to continue in that same vein.

Subquestion 2

The second subquestion for this study was: How does the reader and case author dynamic of blog participation influence the case author's interpretation of Islamic cultural gender behaviors? This question explored how social media interactions may be influencing how the case authors interpreted gender roles within the cultural context of Islam and Islamic feminism. I addressed this question by extracting the data that pertained to gender roles from each case and performing direct post analysis of case author and reader interactions as well as common theme analysis.

The data showed that while each case author posted with regularity about gender roles within the context of both Western culture and Islamic Western culture, the back and forth interaction between reader and case author was less common than with other topics. Case A had the lowest average monthly percentage of the total posts that were associated with gender roles, averaging 0.63% a month and with the highest single month occurrence being 2.2%. Gender role posts for Case B averaged 2.9% of the monthly total with the highest single month occurrence being 9%. Case C had the highest average monthly percentage of gender role posts, averaging 5.1% a month and the highest single

month occurrence of 12.7%. These percentages were indirectly proportionate to the level of fundamentalist on the ideological spectrum that each case author displayed. Case A displayed the most fundamental orientation on the spectrum and had the smallest percentage of gender role posts while Case C was the least extreme on the spectrum and had the highest percentage of gender role related posts. Further observation of these posts demonstrated that most of the case authors' contributions on the topic were stand-alone posts with limited dialogue between reader and case authors about Islamic gender roles and that no meaningful influence on any of the three case authors' interpretations of Islamic gender roles or Islamic feminism could be discerned.

A few themes emerged from the data on gender roles. First, all three case authors posted images of Muslim women stepping outside traditional gender roles, such as flying planes while wearing niqabs. All three case authors posted similar photos of Iranian Muslim women training in martial arts. Case A expanded these nontraditional gender roles for women by writing poetry and short stories about a heroic Muslim woman who leads men into battle and is respected for her strength and prowess: "The grin fades from their faces when I take my sword from its place by my side and allow it to send my message since females need to be quieter than men."

Another theme related to gender that emerged from all three cases was reference to historical Islamic figures which were held forth as examples for modern Muslim men and women, with each case author mirroring the overall tone of her blog in the examples each posted. In accordance with Case A's tone of war and violence throughout her blog, she highlighted Khawla Bint Al Azwar as a historical Muslim woman who fought by

Prophet Muhammad's side. Case B's more scriptural focus was displayed with her quote about how even Prophet Muhammad took care of himself so wives should "not be treated like maids or dogs." Case C's emphasis on gender equality was displayed through her focus on Prophet Muhammad's wife Fatimah, who was his "greatest confidant," far beyond the role of a wife. All three women posted about the piousness of Maryam as the epitome of a Muslim woman.

Each of the three case authors also posted on the theme of misconceptions about Islam as misogynistic and oppressive to women. Case A complained that men objectify women even if they are wearing a burqa and that the lack of respect for women is men's problem, not Islam. Case B reminded followers that they didn't need Western pop culture or the media to validate their beauty because Islam already does that. Case B also blamed the perception of Islam as oppressive to women on misconceptions about polygamy. Case C complained bitterly about the hypocrisy of a "Western Patriarchy" that condemns women for wearing revealing clothes but labels veiled women as oppressed.

Finally, all three women embraced the theme of a more traditional gender role for women within the house. All three case authors unequivocally rejected the notion that a Muslim woman was defined by her house and her children, advocated for gender equality, and yet accepted that Islam gave them specific gender roles within the home and marriage. Case A admitted she was desperate to get married so she could accomplish her "side of marriage responsibilities" and that "a righteous wife can make a poor man feel like a king." Case B emphasized that it was important to marry a man who would increase a woman's piety and that caring for the family is a way women can worship

Allah. Case C reminded her followers that a marriage contract should include elements that will ensure the wife is treated "with honor and dignity" but that ultimately, the man is "the shepherd of the people in his home" while the woman is "the shepherd of the house." This dichotomy reflects key elements of Islamic feminism and is best expressed by a Somali proverb posted by Case C: "where there are no women, there is no home."

In the collected data, there were only two clear instances of direct gender role dialogue between a case author and a reader. Case A was asked if she would consider entering into an Islamic polygamist marriage, and she responded "I would only discuss something like this with my husband." No further posts on the topic followed and neither the case author nor the reader attempted to influence the other on the topic. In the other example, a reader asked Case C about a series of posts where another Tumblr user had disagreed with her and called her a "loud bint." The reader asked about the term "loud bint" and if it meant "that Muslim girls are supposed to stay quiet." Case C answered, "Yeah because they hate women," with "they" referring to the Tumblr user that had insulted her. No further posts on the topic followed. In this example, Case C may have influenced the reader's perception of how some Muslim men treat outspoken Muslim women, but there is no apparent evidence that this exchange influenced the case author's interpretation of Islamic gender roles.

Overall, the data did not support that interaction between readers and case authors had a significant influence on the case authors' interpretation of Islamic cultural gender behaviors. While the data showed that the topic of gender roles within Islam was at least tangentially important to all three case authors, it developed as more of a one sided

presentation of ideas than a constructive dialogue between reader and case author. All three case authors presented fully developed gender role positions that remained static and unchallenged throughout the sampling period.

Summary

In this chapter, the collected data and data analysis within the context of the research questions were presented. Three cases from the social media website Tumblr were chosen for this study. All three cases featured women in their early twenties from Western, non-Muslim countries that had reverted to Islam. On the ideological spectrum used for this study, all three cases were on the conservative side of the spectrum, with Case A espousing the most fundamentally extreme ideology and Case C the least extreme.

I collected data from three sources: archived social media posts, researcher observations, and researcher field notes. The observations and field notes were annotated in the researcher journal. The archived posts were summarized and entered into an Excel database. Coding was accomplished in three rounds. In the first phase of coding, I utilized values coding based on a priori codes developed from the ideological spectrum. In the second phase of coding, I focused coding through 16 in vivo codes to identify emergent themes. The result of this coding was then reviewed so I could discern which codes were emergent in at least two of the three cases. In the third and final phase of coding, I again employed focused coding, this time on two a priori codes providing evidence of social learning and expressions of Islamic Sisterhood.

The data was then analyzed to answer the main research question and two subquestions. In response to the main research question about potential vulnerabilities exploitation by fundamental Islamic organizations, emergent theme analysis of the coded data indicated that fervent activism, dedication to a digital community, and tepid responses to world terror attacks were potential indicators that the authors may be susceptible to targeted radicalization attempts.

In response to the first subquestion, I found indications that differential reinforcement may have influenced the topic and tone of the three case authors' blog entries. The number of ideologically tied and anti-Semetic posts appeared to increase and decrease in response to the monthly average number of reader interactions these types of posts received. Additionally, direct analysis of the coded data identified several examples of differential learning directly impacting an author's post.

Finally, the second subquestion probed the potential influence reader and author interaction had on the blog author's interpretation of Islamic gender roles. Direct post analysis and emergent theme analysis revealed no clear examples of exchanges between the case authors and their readers having any influence on the authors' interpretation of Islamic cultural gender roles. All three case authors demonstrated firm and somewhat dichotomous opinions on gender roles, embracing gender equality outside the home and a more traditional interpretation of gender roles within the home, but these opinions appeared to remain unchanged and immune from reader influence.

Chapter 5 will bring this study together by placing the research into academic and practical context. The findings will be interpreted and the limitations of the study will be

reviewed. Recommendations for future research will also be discussed. Finally, the positive social change and academic implications for this study will be examined.

Chapter 5: Discussion, Conclusions, and Recommendations

In Chapter 5, I discuss, interpret, and place the findings of this research into a perspective useful for practical application. The limitations of the study are assessed and recommendations for future research are discussed. Finally, the social change implications for this study are considered.

Summary of Research

This study was spurred by the growing phenomenon of women from Western countries converting to Islam and then radicalizing over the medium of social media. Research into this phenomenon led to the identification of two intersecting knowledge gaps that needed to be addressed. First, current research on radicalization has been male-centric, leaving policy makers hampered by a lack of understanding of how and why some Western women are targeted for radicalization exploitation (Makin & Hoard, 2014; Sjoberg, 2009; Saltman & Smith, 2015; Von Knop 2007). The second knowledge gap stemmed from the limited research on social learning in a digital age. The Internet in general, and social media in particular, have granted crucial access to targeted audiences for extremist organizations such as ISIS, but little is understood about the role of social learning dynamics in these tactics (Alexander, 2010; Halverson & Way, 2012; Mastors & Siers, 2014; Pradhan, 2011; Keene, 2011; Thompson, 2011). A more thorough and gender-nuanced understanding of how social media, social learning, and radicalization interact is essential for the development of new anticyberterrorism policies that specifically address this new phenomenon (Khan, H., 2014; Saltman & Smith, 2015).

The purpose of this study was to take the first step towards filling these knowledge gaps by developing a greater understanding of how the differential reinforcement tenet of social learning may be affecting the conversion and radicalization of Western women towards a fundamental Islamic ideology through their participation in the social media site Tumblr. I developed an exploratory instrumental case study of three Tumblr blogs purposefully sampled based on three criteria: the blog was written by a woman between ages 18 and 29 who had converted to Islam, was living in a Western country, and exhibited an identifiable ideological shift towards a more conservative Islamic ideology based on the ideological spectrum presented in Chapter 3. Each of the three blogs was considered a case.

I collected data for this study from three sources. First, I printed 21 months of archived data for each case and organized them into monthly sets. Second, I recorded research observations in the researcher journal. Finally, I documented field notes in the researcher journal. My data analysis involved three rounds of coding, pattern identification through graph comparison, identification of emerging themes, and direct post analysis.

The results of this study were several key findings in direct support of the main research question and two subquestions. The main research question focused on identifying ways in which a Tumblr blog may make the case author vulnerable to being targeted for radicalization. This study identified that a high rate of fervent sociopolitical activism, the establishment of a dynamic and emotionally linked digital community, and a tepid response to world terror attacks may all be interpreted as potential vulnerabilities

that could be exploited. Fervent sociopolitical activism may indicate a lack of moderation on issue positioning that could be advantageous to organizations on the extreme ends of the ideological spectrum. Frequent interactions with and emotional attachment to a strictly digital community invite unknown people into the case authors' lives, leaving them susceptible to having their loyalty and commitment to this community manipulated. Finally, a lack of condemnation for a major world terrorist attack could be perceived as ambivalence toward, or even tacit support for, violent tactics and therefore mark the case author as a potential target for radicalization efforts.

The first subquestion for this study targeted the influence of differential learning on the topic and tone of authors' posts, specifically for those related to ideological beliefs. I found that in these cases, an increase in reader interactions with conservative ideological posts were likely to trigger an increase in those types of posts the following month; a decrease in reader interaction led to a subsequent decrease in that type of post the following month. I also identified several examples of how a specific reader interaction prompted a case author to respond immediately with more of the same topic and tone.

The second subquestion targeted how the interaction between the case authors and their readers influenced how the authors perceived Islamic gender roles. In this instance, the extensive data analysis established a negative finding. I found no evidence of dialogue between readers and authors that influenced the authors' perceived gender roles within Islamic culture. Instead, all three case authors displayed static, unchallenged positions on gender that married traditional gender roles with gender equality.

Interpretation of Findings

The findings from this study extend the existing knowledge in three areas critical to the targeted phenomenon. First, the study expands existing knowledge about the role of social media in general and the digital community in particular as a potential enabling agent for learned radicalization. Second, it makes a significant contribution to the body of literature on social learning theory by isolating differential reinforcement from the other three variables of the theory and assessing it through the medium of social media. Finally, it advances knowledge of Islamic feminism and the potential vulnerabilities of Western women converts to Islam.

Social Media as a Radicalizing Instrument

Social media has become such an important part of society that it has permeated and redefined general concepts of society. Social media has created a new type of community, one that exists completely within a digital realm, tied together by ideas instead of physical factors (Bhui & Ibrahim, 2013; Kitchin et al., 2013). As expressed by both Case A and Case C, this digital society is as real and as important to its members as their physical world.

Given this context, it is therefore not that surprising that this study found some of the same dynamics that contribute to social learning in the physical world also played out in the digital world. As discussed in detail in Chapter 2, information on the Internet has become imbued with a sense of authority that may not always be warranted (Aly, 2012; Campbell, 2012; Rothenberg, 2011). This dynamic was observed over and over again across all three cases sampled for this study. For example, despite her lack of personal

experience, Case A attempted to establish herself as a definitive expert on what one should pack if emigrating to Syria to join ISIS. Case B decried modern cultural aspects such as movies and music, imploring her readers to focus on religious verse instead. Case C reached out to new reverts with ideological advice and got into heated disagreements over points of Islamic scholarship, such as whether or not to celebrate the Prophet's birthday.

The concern with this implied but unearned authority is that it creates a potential vulnerability for both the case authors and the readers by exposing them to unverified ideological claims that can be given a type of legitimacy through repetition. Case B best illustrated this concept because of her heavy focus on reblogging religious quotes. While most of the quotes she posted appeared to be fairly benign, the sources of these quotes were often radical clerics and jihadist figures. By repeatedly posting quotes from fundamentalist Muslim sources, Case B was, perhaps unwittingly, imbuing these more radical sources with a certain degree of acceptability. Every time these types of quotes are "liked" and reblogged without challenge, their legitimacy grows and the original sources of the quotes become that much more conventional to both herself and her readers.

A twist on this dynamic was illustrated by Case A, who regularly posted pictures featuring mujahideen playing with cats or engaging in kind acts, such as playing with children in the street. The incongruity of a man holding a rifle feeding stray kittens, standing in a library reading, or kicking a soccer ball creates a paradox that may soften the public perception of these fundamentalist Islamic warriors. In this way, Case A was

using her Internet-sanctioned legitimacy to humanize the mujahideen for her readers and predisposing them to view the mujahideen, and by extension their cause, in a more favorable light.

Social media, by definition, appears to invite others into the author's life. Social media creates a sense of intimacy without the authenticity and time commitment that physical relationships build upon. This intimacy is a vulnerability because it leaves the case author open to targeted exploitation. While most readers are merely benevolent members of the digital social fabric, it is an undeniable truth that there are those in the digital world that dissemble their identity and gather information on their targets so as to establish a false commonality that allows them to prey on the case authors' loyalties and sense of self. Social media is a goldmine of information and opportunity for those seeking new targets to recruit.

When I was young, my mother would tell me a cautionary story about an opportunistic camel that I now find particularly applicable as an analogy for the inherent vulnerabilities that social media presents for radicalization. A Bedouin and his camel were traveling through the desert. After a long day's ride through the sand, the Bedouin stopped for the night and put up his tent, staking the camel outside. As the temperatures began to fall, the camel asked his rider if he might stick just his nose inside the tent as he was so cold. The Bedouin agreed to this reasonable request. A few minutes later, the camel requested if he might stick his head in the tent as well as it was not much bigger than his nose. Again, the Bedouin agreed. Awhile later, the camel again requested if his forelegs may come in the tent as he suffered so from the cold. The Bedouin did not feel

he could begrudge this request and allowed the camel's forelegs into the tent. Progressively, the camel wheedled his way into the tent and the Bedouin soon found himself outside the tent completely.

Following this analogy, social media is the conduit, equivalent to the camel's nose, progressively allowing radicalization to seep into the author's life with seemingly inconsequential steps. Reblogging a religious quote without checking the source lets the camel's nose into the tent. Providing detailed information about one's personal life is the camel's head. Engaging with anonymous readers that press for ideological belief statements is the camel's forelegs. Each step seems innocuous, yet can quickly snowball into a targeted radicalization and recruitment attempt. While social media and the associated digital community bring many positive mental and physical benefits, the inherent dangers should not be underestimated.

Differential Reinforcement Through Social Media

The results of this research are also a significant contribution to the body of knowledge on the differential reinforcement aspect of social learning theory. As discussed in Chapter 2, differential reinforcement has been difficult to isolate from the other tenets of social learning theory, and therefore determining its real-world influence has been problematic. Social media has proved to be an ideal element for obtaining this isolation, making it possible to study solely differential reinforcement in the digital world.

Social media sites such as Tumblr embrace the concept of differential reinforcement with their system of passive reader interaction. By counting how many

people “like” or share a specific post, authors are given a tangible and immediate gratification for every single blog entry. Akin to the societal posturing of popularity, a large number of reader interactions equates with approval and little to no interactions equate with disapproval, thereby providing reinforcement to the author to either repeat the posting behavior or discard it. This study demonstrated the presence of this dynamic across all three cases, with rises and falls in ideological-related postings mirroring the rise and fall in reader interactions for those posts.

This study also identified an unexpected feature of social media and differential reinforcement: the importance of primacy. The vast majority of posts exhibited approximately a 48-hour viability, meaning most reader and author interactions about a post were accomplished in under 2 days. For example, Case A was very fond of reposting the social media equivalent of a chain letter, asking followers to send her messages with a series of numbers, letters, or symbols that corresponded to a list of personal questions that the author would then answer. Those readers that complied overwhelmingly did so in under 48 hours. All three cases demonstrated this same pattern. It was rare to come across a response to a post even a week old. Subsequently, this short lifespan for a post’s relevance meant that the differential reinforcement was also happening quickly.

The primacy factor of social media has important implications, for both radicalizing agents and for those seeking to disrupt the learning of radicalization. Social media moves exceptionally quickly and past posts are soon forgotten, even though they are still accessible. Despite the easy recall archive feature of Tumblr, both Case A and Case C expressed frustration at the repetition of questions they each received because

their readers did not bother to read past posts. Therefore, any individual or organization seeking to influence the behavior of individuals through social media has to be prepared to keep their own agenda in the forefront of a medium that is always moving on to the next thing and the next post. Successful countercyber radicalization policies for social media cannot be based on single connections, but instead will require consistent engagement to retain the element of primacy even as radicalizing elements will be attempting to maintain the same preeminence. Social media counter-radicalization struggles will ultimately be decided by who is interacting the most often over the longest period of time.

Islamic Feminism and Western Women Converts to Islam

This study applied Islamic feminism as a conceptual framework, providing a culturally appropriate perspective for the analysis of gender role data. As discussed in Chapter 2, Islamic feminism rejects the Western, secular form of feminism and instead pursues feminist ideals through the cultural and religious lens of Islam (Blore, 2010; Chamas, 2009; de Groot, 2010; Jad, 2011; Khamis, 2010; Llewellyn & Trzebiatowska, 2013; Malik, 2010; Salem, 2013, Seedat, 2013b; Trier-Bieniek, 2015). Islamic feminism simultaneously embraces traditional gender roles in the home for Muslim women while simultaneously striving for the gender equality in patriarchal cultures.

When viewed through an Islamic feminist lens, the common theme of adherence to traditional gender roles even while agitating for gender equality that emerged from all three cases no longer appears paradoxical. Instead, it is the embodiment of modern Islamic feminism: the marrying of traditional and modern values underneath a religious

awning. These three cases did not break any new ground as far as gender roles or gender specific socio-political issues, but they did demonstrate that Islamic feminist ideals are applicable even in non-Muslim, Western countries. The importance of this lies in the need for continued applicability of Islamic feminism throughout both academic research and for policy development and implementation.

Limitations of the Study

Productive, efficient, and successful research involves setting a defined scope of study. By knowing the limitations of a study, one is better able to gauge the quality of research as well as its transferability. Post analysis, this study has a few limitations that require further discussion.

The most significant limitation of this study is that there was no contact with the case authors. All data was collected through their Tumblr blogs. No questions were asked; no clarification was sought; no information was solicited. All analysis was accomplished based on data publicly available for all three cases on Tumblr. This was a deliberate decision because I wanted the study to focus on what was being presented to the public and to avoid any potential security or exploitation concerns. Yet, it is a limitation because I was unable to ask the case authors what they were thinking. I could not ask Case A why she hashtagged posts as "jihad" or what drew her to idealize ISIS leadership, if Case B was consciously choosing quotes by fundamental clerics, or if Case C intended to convey the anti-Semitic tone her posts were portraying. This study, however, was fundamentally about the learning that happens on social media where the readers and authors do not have the ability to discern any other contextual clues. All

analysis was done based on the assumption presented in Chapter 1, that the blogs represent the truth as perceived by the participants. There may be other conclusions that could be drawn from the data if case author input had been included, but the analysis and conclusions presented here are limited by being based solely on the publicly available data.

The sampling process for this study is another limitation. Tumblr is a massive social media site with literally hundreds of thousands of blogs. Despite keyword searches and a careful screening process, there is a possibility that there were other blogs that better illustrated the targeted phenomenon. However, the three cases I chose for this study were the blogs that best met the established criteria from the selection pool built from a multi-step selection process. The variance in the three cases established variety and breadth for the targeted phenomenon, increasing the transferability of this study.

Finally, an unexpected limitation for this study was the nature of constraints I placed on case selection. For example, the age requirement set in the original proposal was 18 to 29 years old. I had not expected to find so many potential cases that displayed indications of radicalization with authors that were under 18 years old. All three case authors in this study were involved with post-secondary education or careers and were adults, legally and economically. I was unable to determine if being a legal minor or living at home under the guardianship of adults would have influenced the data. Another constraint I placed on case selection was the requirement that a case be active for at least a year. Several potential cases were discarded because they had not met the time threshold despite being good examples of the targeted phenomenon. All three cases

sampled had been in existence over two years and had built a reader base, which may have impacted the differential reinforcement patterns. It is an unknown in this study if "younger" blogs with a less developed reader base would demonstrate the same social learning patterns.

Recommendations for Future Research

This study targeted the phenomenon of Western women converting to a radicalized Islamic ideology through social media. As demonstrated in the literature review, the existing research on this emerging topic is very minimal. This study represents an initial foundational foray into this field of research. The analysis, conclusions, strengths, and limitations of this study indicate avenues for future research.

Given the large amount of data already collected, future study could expand upon that foundation and continue observing these three sampled cases in real time to see if the identified themes continue. Case C in particular would be important to follow since her placement on the ideological spectrum is less radicalized; she represents a potential opportunity to observe radicalization in process if her blog continues to develop in that manner or to observe a retreat from radicalization if she changes direction in the future. Future research using these three cases could also include a provision to contact the authors for clarification on their blog posts, thereby addressing a major limitation of this study.

Another potential area for future research is expanding on social learning in the social media environment. The data analysis identified indications of differential reinforcement by the case authors based on the average number of reader interactions.

Future research could expand upon the social learning aspect by looking for indications of readers learning from the author. For example, one could select a few readers from each of the cases used in this study and observe what these readers then share from the original case authors. Future research could also continue to isolate the differential learning component and see if the patterns identified in this study can be extended beyond ideologically related content.

Finally, a future study that expanded the sampling pool by changing the selection constraints would examine whether or not the themes identified in this study were applicable to younger blog authors and less established blogs. In that vein, this research model could be repeated to include more cases and verify that the themes and patterns remain consistent as repetition increases credibility.

Implications

The findings of this study address knowledge gaps in understanding the learned radicalization of women through social media. Analysis of the data collected provided key insights into potential radicalization vulnerabilities that social media makes public. The implications of this research for positive social change involve several different societal levels: familial, organization, and policy.

As social media has grown, so has its influence and role in modern living. An example of this can be seen in the sheer number of postings every month in the Tumblr blogs chosen for this study. Each and every month, with only one exception in Case B, all three case authors posted on average more than one entry a day. In the month of January 2014, Case C peaked with an average of 54 individual posts a day. This represented a

significant time commitment and indicated an important role in each case author's life. Social media has become a social realm in which these authors were spending a large percentage of their recreational time. As the cases also demonstrated, social media can be used as a platform to share a great deal of personal information that may leave one vulnerable to targeted radicalization attempts as well as a place one can learn radicalization from a social community.

By identifying these vulnerabilities and demonstrating the presence of social learning of an ideological tone on social media, this research has implications for cyber awareness and safety education at both the familial and organizational level. Social media feels safe because of the sense of community it inspires, but it is a false sense of security as this study helped to demonstrate. The findings of this research have laid a foundation for the development of public cyber safety education campaigns that can be used by families as well as adapted to educational organizations such as school and youth organizations.

To be most effective, a public cyber safety education campaign should be multifaceted, paring child conversational aids made available to parents with more formal programs through the schools aimed at teaching adolescents and young adults how to defensively interact within the social media framework. I agree with Saltman and Smith's (2015) recommendation for the development of a cyber education program modeled on the 1990s anti-drug use programs and the findings from this study are starting points for just such a program. For example, young social media users may not be aware of just how much personal information they are sharing or how to avoid it. They may also lack

the perspective that, despite frequent cyber interactions, members of their digital community can still deceive them or not have innocent intentions. A middle and high school educational program that included suggestions on how to set security settings, how to limit personal data, and how to identify potential influencing attempts could have a major influence on adolescent cyber security. Such an educational program could also focus on the differential reinforcement component by teaching young people to mentally re-prioritize the importance they place on reader interactions.

Other positive social change implications exist at the policy level. This study presents the evolution of learned digital radicalization in the words of women, a stark contrast from the more male-centric policies currently in place. My findings on the interplay between Western culture, Islamic feminism, and traditional gender roles provide insights that may be used to develop more gender focused cyber counter-radicalization policies.

This study may also help government agencies identify future at-risk women through social media. The sheer size of social media and the difficulty of reading the intent behind the actual words and images in these postings makes it very difficult for government intelligence agencies to accurately and efficiently identify radicalizing individuals, even with the help of metadata systems. My findings may potentially help this effort by providing new elements for metadata delimiters, such as a significant change in current event posting behavior or an increasingly fervent strain of activist postings. Expanding the searching ability of agencies attempting to identify vulnerable

women increases the likelihood of being able to engage these women before a tipping point of radicalization has been reached.

Finally, this study has theoretical implications for homeland security public policy. Homeland security research has been scattered across a wide variety of disciplines because it affects so many fields (Klitz & Ramsay, 2012). The concern with this expanded research application, though, is that it makes it difficult to find and then consolidate the varied conclusions into usable actions. This study successfully brought homeland security under the public policy umbrella, placed it within an established public policy theoretical framework, and resulted in clear policy vectors for future development. This study stands as an example of how homeland security research can work under the auspices of public policy research.

Conclusion

This qualitative, exploratory instrumental case study probed the emerging phenomenon of Western women Islamic converts being radicalized through social media within the theoretical framework of social learning theory. Purposeful sampling led to the identification of three Tumblr microblogs that demonstrated a conservative Islamic ideological shift in their blog posts.

Analysis of the collected blog postings identified three common themes that may make the case authors vulnerable for targeted radicalization. The first was a strain of zealous activism that eschewed any socio-political moderation. All three cases demonstrated a one-sided dedication to their causes of choice, with Case A even going so far as to endorse violence as a viable socio-political solution. This uncompromising

commitment may have marked the case authors as willing to adhere to a "right" versus "wrong" ideology that could be re-directed to a different cause, such as fundamental Islam.

The second vulnerability theme identified was the importance placed on the digital community. Case B was an anomaly to this theme due to the nature of her blog, but both Case A and Case C demonstrated appreciation, devotion, and loyalty to the readers they considered friends as real as any physical connections. This attachment to their digital communities may be a vulnerability because, combined with the amount of personal data they each placed on their blogs, a potential radicalizing agent would be able to play on the case authors' sympathies and activate their protective streaks.

Finally, all three cases broke with their normal posting patterns on socio-political issues by ignoring major world terror events in France and Belgium. Failure to condemn these attacks may be perceived as being ambivalent and therefore potentially sympathetic to radicalization advances from groups that condone these types of violent tactics.

I also found in the data evidence supporting the social learning theory tenet of differential reinforcement. Both Case A and Case B increased and decreased their conservative ideological posts in apparent response to reader interaction increases and decreases while Case C increased and decreased her anti-Semitic posts in apparent response to reader interaction fluctuations. More direct examples of differential reinforcement were also evident, such as when Case A immediately increased her posting of images of mujahideen playing with cats in response to a reader asking for more.

Despite a great deal of conversation about gender roles in non-Muslim Western culture and in Islamic culture, I found no evidence of reader and case author interaction influencing or changing the case authors' stance on gender roles. Throughout the sampled data, the case authors each remained remarkably constant in their gender role positions. All three displayed gender role statements consistent with Islamic feminism dogma by defending a generalized gender equality coexisting with traditional gender roles inside the home, with Islam as the critical foundation.

Trustworthiness was pursued with rigor in this study so as to establish the quality of research. Credibility was established through triangulation of sources and prolonged contact with the data sources through archived digital data. Transferability was established through transparency in every phase of the study and purposeful sampling for variety within the targeted phenomenon. Dependability was established with triangulation of sources, detailed descriptions of the data collection and analysis process, and the creation of a verifiable case study database. Finally, confirmability was maintained through a conscious objectivity and moral neutrality.

This study has both academic and positive social change implications. Academically, it stands as an example of how public policy theoretical frameworks can provide policy recommendations for homeland security, a field struggling under competing disciplines of study. In regard to social change, this study provides crucial new information that can be used by policy experts at the organizational and governmental levels to develop more gender nuanced anti-cyber radicalization and anti-cyber terrorism policies. This study also laid the groundwork for the development of an

educational awareness program usable at both the familial and organizational level. This educational awareness program would target at-risk teens to build cyber radicalization awareness.

Social media has become so pervasive that it cannot be undone. Yet as this study has demonstrated, it remains a dangerous minefield for the unwary who over-share and become dependent on achieving the illusive and fleeting digital equivalent of popularity: temporary relevance. When a social media user becomes mentally and socially dependent on the number of reader interactions they are receiving for each of 30 or 40 posts a day, they become vulnerable to manipulation. A cyber educational awareness program is therefore the first and most important key to combatting the phenomenon of cyber-radicalization. We must, as a society, as an educational system, and as family members teach our cyber active children and young adults to be cautious consumers, to protect their privacy, and to be wary of those that seek to influence them.

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Appendix: Terminology

In this appendix, I have listed some of the cultural terminology I encountered during this research. Within this study and subsequent write-up, I chose to apply these terms in the same manner as the case authors to maintain the integrity of their narrative and to provide an honest representation of their voices. Therefore, this terminology list is not meant to be an academic list of definitions but provides the definitions as used by the case authors within the sampled data.

Abaya: loose fitting robe worn by some Muslim women, can be combined with a variety of head coverings

Burqa: loose fitting robe that covers the wearer from head to toe worn by some Muslim women in public to provide maximum coverage of their body

Dua/Duaa: Islamic prayer

Dunya: the physical world or realm

Haram: that which is forbidden by Allah

Hijab: head covering that covers the head but not the face, worn in public by some Muslim women; may be combined with a variety of other garments including pants, skirts, and abayas

Jihadist: synonymous with Mujahideen, often with a derogatory and controversial perception implied

Mujahideen: a fighter or soldier in the name of Islam, usually in opposition to non-Muslim forces; usually applied to those fighting for Islamic fundamentalist

organization such as ISIS, the Taliban, and the Free Syrian Army; positive perception implied

Muslimah: female adherent to Islam

Nasheed: Islamic religious chant

Niqab: head covering that covers the head and face with the exception of the eyes, worn in public by some Muslim women; often paired with an abaya