FROM SUBJECTS OF CHANGE TO AGENTS OF CHANGE: DIGITAL LITERACY

PRACTICES OF ALGERIAN WOMEN DURING THE 2019 POPULAR MOVEMENT

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A Dissertation

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by

Bahia Braktia

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DEDICATION

I dedicate this dissertation to my late father Dr. Belkacem Braktia may he rest in peace. It is painful to lose you, but your love and support will always be with me. To my mother Djouhra Abdessemed, you are my sun.

ABSTRACT

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Through a content analysis, this study sought to examine women's digital literacy practices during the 2019 Algerian popular movement called the Hirak. Data were collected from Twitter. The selection criteria for the sampling was set to be user-generated content mined through the hashtag خليها_تهدر# (#Let_her_speak). Tweets, comments, videos, photographs, and pictures were collected. The timeline for the data collection was set between March 29, 2019 and April 30, 2019. The analysis procedures were inductive and followed a coding process of five cycles.

Findings indicated that women's digital activism via Twitter went through a simultaneously empowering and oppressing dynamic. Women relied on the speed, interactivity, and flexibility of social media platforms to support the feminists' demands and place women's rights in the Hirak. This study's findings mirrored the body of research that considered social media as a game changer for gender equality and viewed Twitter as a powerful instrument to push women's issues onto the public agenda.

However, Twitter did reflect the real-world patterns of the Algerian society, and verbal attacks and threats of physical abuse took place. Feminists were threatened with acid attacks and were verbally abused on Twitter. The online harassment of women shed light on how the digital world is far from being a utopia, and the constant analysis of the utopian and dystopian aspects of social media platforms is necessary to advance women's digital literacy skills.

Women's activism during the Hirak uncovered a few digital practices that can be incorporated to boost learners' political participation. First, it is imperative for educators to address the digital divide in their classrooms to ensure digital equity for everybody. Second, understanding learners' social media use is a key element to inform future education policies and practices. Finally, learners have to develop a critical perspective toward social media and fully understand the empowering and disempowering nature of online spaces.

KEY WORDS: Algeria, Cyberfeminism, Digital literacy practices, Political uprising, Social media, Twitter, Women empowerment.

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CHAPTER I

Introduction

When documenting great historical moments, women's contributions have been decreasing from historical accounts. In addition, historical reports have often depicted women as the weak link rather than leaders and agents of change in their societies (Brownlee, 2017). I have witnessed this discrimination when my late grandfather, a veteran of the Algerian War of Independence, did not include my grandmother's activism during the war in his memoirs. Even though my grandfather had always believed in women's empowerment, he still, maybe unconsciously, conducted discriminatory actions. This discriminatory heritage has been entrenched in the cultural, social, economic, political, and legal aspects of Algeria (Khanna, 2008; Moghadam, 2003). Gender discrimination have restricted women's advancement in the country (Sadiqi & Ennaji, 2011; Skalli, 2011). Algerian women relentlessly fought for their rights and stood up against oppression throughout the years (Moghadam, 2003); however, they still have a long way to go to achieve equality and social justice (United Nations Development Programme (UNDP), 2016; World Economic Forum, 2018).

The spread of Information and Communication Technology (ICT) tools took women's activism to a new level (Gheytanchi & Moghadam, 2014). Social media platforms have offered women a new way to enter the public sphere and voice their concerns (Altuwayjiri, 2017; Bailey et al., 2013; Moghadam & Sadiqi, 2006). Women in the Middle East and North Africa (MENA) reached out via platforms such as Twitter, Facebook, and Tumblr to fight oppression (Chafai, 2017; Lim, 2018; Shirazi, 2012; Skalli, 2011). Women in Saudi Arabia used multiple hashtags such as:

#EndMaleGuardianship and #IamMyOwnGuardian to stand up against male guardianship (Thorsen & Sreedharan, 2019), and women in Morocco used #RIPAmina to fight violence against women (Sara, 2015).

However, online activism requires accessibility and digital literacy skills (Garcia, 2011; Suwana, 2017; Thompson & Paul, 2016). According to Thompson and Paul (2016), to be an active participant in the society, people should be able to access and use digital technologies in a purposeful way. Meanwhile, researchers have been expressing concerns on the widening gender digital gap around the world (Bhandari, 2019; Hilbert, 2011; Mumporeze & Prieler, 2017). Women have less accessibility, use, and lower digital literacy skills compared to men (Asiedu, 2012; Ben Hassine, 2014; Mubarak, 2014; Mumporeze & Prieler, 2017; Ono & Zavodny, 2007), which is adding to the already existing strains on women empowerment (Asiedu, 2012; Sarkar, 2016; Webb, 2016).

Despite the gender digital gap, women in the MENA region sought social media platforms to act as agents of change during political upheavals (Gheytanchi & Moghadam, 2014; Radsch & Khamis, 2013; Tufekci & Wilson, 2012). During the Arab Spring, women were pioneers in reporting the violence inflicted on protestors by the government during the Tunisian revolution (Pedersen & Salib, 2013). They rallied up citizens in the revolutionary Egyptian Tahrir Square (Abdulla, 2011; Høigilt, 2011; Radsch, 2012). They mobilized protests during the revolution in Yemen (Radsch, 2012; Radsch & Khamis, 2013), and they showed persistence in opposing the ruling regime in Syria (Brownlee, 2017; Langer, 2017). The Arab Spring represented an opportunity for women to put women's rights at the center of political change (Brownlee, 2017).

Just like their fellows in the MENA region, Algerian women joined the 2019 popular movement, or what is called Hirak, protesting the corrupt ruling regime. On February 22, 2019, demonstrations all over the nation were organized to protest President Bouteflika's nomination for a 5th term. The deteriorating relationship between the government and the people provoked anger and dissatisfaction among Algerians (Haffaf, 2019). Chikhi (1999) argued that the unemployed and youth are social outcasts in Algeria and have become socially and culturally marginalized. The Office National des Statistiques (ONS) (National office of Statistiques) (2017) reported that half of Algeria's population is under the age of 30. With women representing half of the population, their participation in the protests was highly noted (Mas, 2019). According to Tripp (2019), hundreds of thousands of women joined the protest to challenge the ruling regime. Tripp argued that in the past, women took part in manifestations but never on this scale. Haffaf (2019) noted that Algerian women have fought for 57 years for equality, and they are seizing the current wave of change to call for action.

During the Hirak, Algerian women took to the streets in unprecedented numbers (Sidi Moussa, 2019; Tripp, 2019; Zanaz, 2019). Joining the ranks of the Hirak allowed women to claim the public sphere (Tripp, 2019; Zanaz, 2019). Women from all ages, class, and education levels gathered to not only call for political change, but also to advance their equality demands (Ouitis, 2019). In an attempt to mobilize themselves during the Hirak, the Algerian Women for Change Toward Equality set up a feminist square in front of the Central Faculty in Algiers (Ouitis, 2019; Wartelle, 2019). Two weeks later, the square was attacked by a group of men who destroyed their signs and told them that it was not the moment to call for women's rights (Benfodil, 2019; Ouitis,

2019; Wartelle, 2019). However, women carried out their feminism, and used social media to document the violence inflicted against them, to state their commitment to feminism, and to mobilize women (Benfodil, 2019).

Background of the Study

The current study proposal emerged from my first academic encounter with feminism in the MENA region back in 2010 when I was pursuing my master's degree in translation. For my thesis, I had to translate from English into Arabic three chapters from a book titled Feminism in Islam: Secular and Religious Convergences by Margot Badran. The book addressed feminism throughout the Arab world, and it was the best thing that happened to me. To properly translate the book, I had to immerse myself in the literature around feminism in the MENA region, and it took me through an emotional and powerful journey. I read books such as The Political Hareem that made me feel empowered and ready to take down the patriarchal system, and books that made me feel angry, frustrated, and break into tears. I related to the women I was reading about, I admired the hard work of all the feminists, and before I knew it, my passion for feminism sparked in my heart.

When the Hirak started in Algeria, and my social media accounts flooded with pictures of women fearlessly conquering the public sphere to make their country a better place and claim their rights, I felt my passion for feminism revived. I knew that I had to contribute to this historical national movement and support my fellow Algerian women in their quest for equality by documenting their bravery and activism. As a researcher, I asked myself: What motivated them to join the Hirak? How did they incorporate women's rights in Hirak's demands? What roles did social media platforms play in their

activism? What challenges did they face in using platforms? And how did they overcome these challenges?

Statement of the Problem

The last few decades in Algeria, marked with a violent conflict and economic liberalism, imposed pressure on the everyday life of Algerians, but mostly burdened women (Lloyd, 2005). The government failed to acknowledge women's rights, as President Bouteflika argued that the country's priority was economic stability and that Algerian women should wait for the society to accept change (Salhi, 2003). Algerian women have been facing discrimination in employment, gender inequality, family violence, and abuse of power (Barka, 2005). The prevailing disempowerment of women is rooted in cultural, social, economic and political factors along with many legal obstacles (Abdellatif et al, 2017; Moghadam, 2003). Algerian women live in a virile society that often speaks in their name but fails to represent their interest, andthey are not politically unified which makes them invisible to political and civil society (Lloyd, 2006, Khanna, 2008). Such a society has also exposed them to domestic and institutionalized violence (Abdellatif et al, 2017). Algerian women have been suffering from unemployment and exclusion from the formal economy (Abdellatif et al, 2017; Barka, 2005; Lloyd, 2005). Bakra (2005) argued that even though the increase of educated women facilitated their integration in active life, women's access to the job market was still bound by socio-cultural constraints and household duties. She noted that the Algerian Constitution guaranteed equality for women and included clauses favorable to women's work, but employment of women remained low. According to Office of National Statistics (2016), Algerian female employment rate is three times lower than male

employment in urban cities, whereas it is almost seven times lower in rural areas. The lack of women participation in the work force created a gender gap in Algeria of 76% (World Economic Forum, 2016).

Women have been experiencing troubles with their traditional social roles and invisibility in the public sphere (Newsom & Lengel, 2012; Sadiqi & Ennaji, 2010). The public sphere has prevailed as a "self-acclaimed space of male absolute power and dominance" (Skalli, 2006, p. 38). Women's access to the public sphere is challenged by the tight male grip of politico-religious centers of power (Skalli, 2006). The public sphere is defined as the center of power, and the private sphere is considered as the space where the power is implemented (Sadiqi & Ennaji, 2010).

Women's access to education and employment allowed them to undermine patriarchy, but they have made little gains (Abdellatif et al, 2017; Moghadam, 2003). Feminists and women organizations have been fighting oppression in the public domain, appealing family laws, criminalizing violence in all its forms, and calling for a larger access to employment and politics for decades (Abdellatif et al, 2017; Lloyd, 2005; Moghadam, 2003). However, little has been done to address women activism and their role in the civil society in the MENA region (Al-Rawi, 2014; Barka, 2005; Moghadam, 2003; Newsom & Lengel, 2012), and more specifically in Algeria. Throughout history, Algerian women have played pivotal roles in public life, but it was largely unacknowledged (Lloyd, 2005). In light of these limitations, it is necessary to explore women's participation in the 2019 Hirak to highlight their roles as agents of change in times of instability.

Purpose of the Study

The purpose of this study was to examine women's digital literacy practices during the 2019 Algerian Hirak that led to the resignation of President Bouteflika, who had been in power since 1999, and the ongoing trials of multiple political figures in court. This study payed specific attention to the enabling effects of ICT tools and how social media platforms gave Algerian women the opportunity to act as agents of change in the fight for women's rights. It investigated how social media platforms allowed them to articulate their identities and take on the roles of civic and political responsibility in such a historical phase of their country.

Significance of the Study

This study shed light on how digital literacy skills are crucial to offering girls and women opportunities for social change and inclusion. Digital literacy skills, which includes information and media literacies, opens possibilities for educators to think in new ways to foster active, political participation in the public sphere and engage students' social contexts, personal histories, and multiple subjectivities (Bali, 2019; Kenway & Nixon, 1999). Educating and preparing students to utilize ICTs will help them become capable critical and creative citizens (Collingwood et al., 2012; Kenway & Nixon, 1999).

Many researchers have found that digital literacy skills are crucial for women empowerment; however, they have been exclusive to educated women from middle and upper middle classes with high social and technical connectivity (Ben Hassine, 2014; Khamis, 2019; Newsom & Lengel, 2012; Sarkar, 2016; Stephan, 2013). Researchers have been concerned with the widening gender digital gap around the world (Bhandari, 2019; Hilbert, 2011; Macueve et al., 2009; Mumporeze & Prieler, 2017) The

underrepresentation of female students in Science, Technology, Engineering, and Mathematics (STEM) education has been marginalizing women in the ICT domain (Hilbert, 2011; Lee, 2002; Mumporeze & Prieler, 2017). Male-favoritism, patriarchy, income, and social and cultural norms restrained women's accessibility and use of technology, which puts them in a disadvantaged position compared to men (Ben Hassine, 2014; Comfort & Dada, 2009; Garcia, 2011; Mubarak, 2014; Potnis, 2016). These restraints have been burdening women and escalating the already existing gender inequalities in job opportunities, class, education, decision-making, health, financial stability, and economic growth (Asiedu, 2012; Hilbert, 2011; Mumporeze & Prieler, 2017; Sarkar, 2016; Webb, 2016).

Theoretical Framework

Feminist research approaches focus on women's issues and the institutions that frame those issues (Creswell & Poth, 2018). Cyberfeminism theory aligns with third-wave feminism, which was a critical response to the political exclusions and biases of the second wave (Sundén & Elm, 2007). Third wave feminism, which entwined with poststructuralism, postmodernism, queer theory, black feminism, and postcolonial theory, is the multidimensional assertion of multiple differences and power hierarchies that situate women in relation to men and in relation to one another (Sundén & Elm, 2007, p.4). However, looking deeply into cyberfeminism, one can find that it has been heavily criticized for its utopian vision (Brophy, 2010), for not taking into consideration the social construct where it takes place (Cunningham & Crandall, 2014), and for not addressing the gender digital divide (Puente, 2008). Researchers have been calling to reinvent cyberfeminism to address these missing links (Brophy, 2010; Daniels, 2009;

Kenway & Nixon, 1999; Paasonen, 2011; Wilding, 1998a, 1998b). To answer criticism,

Hawthorne and Klein's (1999) CyberFeminism approach addressed connectivity,

critique, and creativity as an attempt to cover the gaps. Additionally, Wajcman's (2004)

Technofeminism approach is a good framework to address the gender digital gap by

encouraging women to take active roles in the use and production of technologies. Based

on all these concepts, a framework was created that takes into consideration the criticism

of cyberfeminism and still draws from the utopian concepts of cyberfeminism. Figure 1

illustrates this theoretical framework developed for this study.

Figure 1

Cyberfeminism as a Theoretical Framework
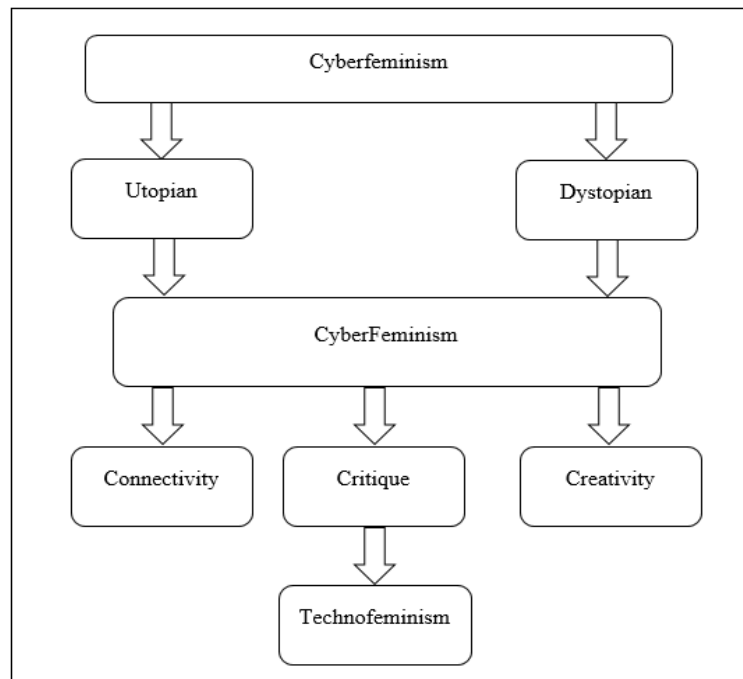
Cyberfeminism

Utopian Cyberfeminism. Cyberfeminism is considered as one of the emergent

feminist theories combining gender and technology (Fox et al., 2006). In the 1990s,

cyberfeminism crystallized and flourished (Paasonen, 2011). Cyberfeminism examines the ways ICTs and the Internet offer new opportunities to emancipate or oppress women (Evans, 2014b; Fox et al., 2006). These technologies have been described as both promising and threatening, carrying the possibilities of simultaneously empowering and suppressing women (Sundén & Elm, 2007). The term "cyberfeminism" was coined in 1991 by VNX Matrix, an Australian art collective of four women: Josephine Starrs, Julianne Pierce, Francesca da Rimini and Virginia Barratt (Evans, 2014b; Fox et al., 2006; Hawthorne & Klein, 1999; Wilding, 1998). They published their iconic "Cyberfeminist Manifesto for the 21st Century," which envisioned technology as a way to break down sex and gender divisions (Evans, 2014a; Hawthorne & Klein, 1999; Wilding, 1998). The VNS Matrix displayed their manifesto on the internet and on a large billboard (VNS Matrix, 1991):

> We are the modern cunt
>
> positive anti reason
>
> unbounded unleashed unforgiving
>
> we see art with our cunt we make art with our cunt
>
> we believe in jouissance madness holiness and poetry
>
> we are the virus of the new world disorder
>
> rupturing the symbolic from within
>
> saboteurs of big daddy mainframe
>
> the clitoris is a direct line to the matrix
>
> the VNS MATRIX
>
> terminators of the moral codes

mercenaries of slime

go down on the altar of abjection

probing the visceral temple we speak in tongues

infiltrating disrupting disseminating

corrupting the discourse

we are the future cunt

VNX Matrix started coding, building websites, flooding online communities such as LambdaMOO, and telling their stories through games they created such as All New Gen and BAD CODE (Evans, 2014b; Kenway & Nixon, 1999; Paasonnen, 2011). Cyberactivism was then defined by Sadie Plant (1996) and Melanie Stewart Millar (1998) as the liberating force of technology from repressive regimes and inequality (Cunningham & Crandall, 2014; Daniels, 2012; Fox et al., 2006; Hawthorne & Klein, 1999). Plant (1996, 1997) perceived the digitalization of society as its feminization, and the advancement of technology would lead to the emancipation of women. Millar (1998) defined cyberfeminism as:

A women-centered perspective that advocates women's use of new information and communications technologies for empowerment. Some cyberfeminists see these technologies as inherently liberatory and argue that their development will lead to an end to male superiority because women are uniquely suited to life in the digital age (p. 200).

Plant (1996, 1997) highlighted the possibilities for political gain through feminism in the cyberworld as a coalition between women and technology to revolt the patriarchal system seeking to oppress them. Plant perceived the cyberworld as utopian

space where body, gender, race, ethnicity, religion, age and sexuality are dismantled, or the disembodiment of cyberspace (Brophy, 2010; Fox et al., 2006; Paasonen, 2011). This optimism toward technology was heavily criticized by many scholars (Brophy, 2010; Paasonnen, 2011; Puente, 2008).

Dystopian Cyberfeminism. In the late 1990s, a dystopian wave of criticism grew challenging the overt optimism of the cyberfeminists such as Plant and Millar (Brophy, 2010; Cunningham & Crandall, 2014; Paasonnen, 2011). Scholars criticized utopian cyberfeminism for not addressing issues of access, cost, literacy, voice, gender and race, imbalance of power, and control of ICTs (Cunningham & Crandall, 2014; Kenway & Nixon, 1999). The disembodiment of cyberspace hinders the understanding of the process and performance of gender norms (Brophy, 2010; Foster, 1999; Sundén, 2001). It subverts the social order (Henthorne, 2003); which causes the loss of social and cultural configuration alternative conceptions (Wood & Smith, 2005). Then, this disembodiment would put at risk decades of hard work invested by critical, feminist, and progressive educators to establish 'the body' as central to knowledge production (Boler, 2007).

Cyberfeminism has been criticized for overlooking the imbalance of power structured in technological systems (Cunningham & Crandall, 2014; Wajcman, 2013). Online spaces do not eliminate hierarchies through free exchanges of information within artificial boundaries (Wilding, 1998b). Additionally, cyberspaces cannot abolish people's experiences with race and gender in real life (Nakamura, 2002).

Gajjala (1999) argued that cyberfeminism ignores "the complexities of the lived contexts of women" (p. 619). It assumes that women have access and are able to use technology (Kenway & Nixon, 1999). Accessibility offers rich opportunities to address

community building and opens the door to discuss identities, race, and gender (Nakamura, 2002). However, ICTs are not inclusive (Nakamura, 2002). Most internet users are assumed to be tech savvy middle-class white men (Brophy, 2010; Nakamura, 2002). Additionally, cyberfeminism disregarded online harassment and cyberstalking (Brophy, 2010).

Reinventing Cyberfeminism. Many scholars called for revisiting cyberfeminism and readjusting it in the prevailing technological landscape (Brophy, 2010; Daniels, 2009; Kenway & Nixon, 1999; Paasonen, 2011; Wilding, 1998a, 1998b). The cyberworld is a central point of gender struggle, and it requires gender diversification (Wilding, 1998). The claim is that there should be a balance between the utopian and the dystopian to be able to move ahead with cyberfeminism (Paasonen, 2011; Wilding, 1998b). There is a call to incorporate the utopian and political ambitions of cyberfeminism (Wilding, 1998b). The cyberworld is considered as a central, public, and political space where women have unequal access and equality is required (Kenway & Nixon, 1999).

It is extremely important to acknowledge that technology exists within a social construct that embodies cultural, economic, and political practices and that carries sexist and racist conditions (Hawthorne & Klein, 1999; Wilding, 1998a). For example, Wilding (1998a) argued that if the internet is increasingly the main source of information, then women need to participate in the programing, policy setting, and content formations of it. A strategic and politically keen exploitation of technology can develop a transformational movement that seeks to demolish the networks of power and communication through

feminist projects of solidarity, education, freedom, vision, and resistance (Wilding, 1998a).

CyberFeminism: Connectivity, Critique and Creativity

Hawthorne and Klein (1999) revisited cyberfeminism by including connectivity, critique, and creativity elements to it. They referred to it as "CyberFeminism" and defined it as:

> CyberFeminism is a philosophy which acknowledges, firstly, that there are differences in power between women and men specifically in the digital discourse; and secondly, that CyberFeminists want to change that situation. How precisely the power differences are played out, and which elements are highlighted depends on context. Similarly, the strategies chosen by CyberFeminists to challenge this system depends on the interests and expertise of the women engaged in the work. CyberFeminism is political, it is not an excuse for inaction in the real world, and it is inclusive and respectful of the many cultures which women inhabits (pp. 19-20).

Hawthorne and Klein (1999) argued that for cyberfeminism to be become "CyberFeminism," it has to rely on the critical aspect of feminism, the critique of social norms and constructs, to identify oppression and injustice, and to have an impact.

Connectivity. Connectivity is the core of feminism (Daniels, 2009; Levina, 2012; Wilding, 1998b). Hawthorne and Klein (1999) highlighted the role of technology in connecting feminists around the world to explore similarities and recognize diversity, or what Blair et al. (2009) referred to as "Virtual Kinships." Hawthorne and Klein characterized technology and the Internet as a blessing to develop networks, facilitate

meetings, spread information, and increase the speed in which you can reach out to targeted people. They noted its power to change the culture and open new opportunities for activism. For example, it facilitates campaigns on both the international and national levels.

Hawthorne and Klein (1999) did not ignore the pitfalls of connectivity. It might lead to the disconnection from the local and the real. CyberFeminism can become isolated if it does not connect with activism locally on the ground. They argued that technology can undermine the dominant knowledge system, but only when connected with politics, knowledge, dedication for the local causes, creativity, and acknowledging that online sharing is public property and can be exploited positively and negatively.

Critique. Hawthorne and Klein (1999) emphasized the importance of having a critical perspective toward cyberspaces. Eudey (2012) suggested that cyberfeminism includes: "those forms of activism that not only utilize the Internet, but also include critical reflection of the ways in which sexism and other oppressions are components of the online experience" (p. 241). Hawthorne and Klein (1999) noted that cyberspaces bring up old and new feminist issues such as resource accessibility and use, digital literacy skills, data privacy, online harassment, and male dominance of the technology world. For cyberfeminists to exploit cyberspaces for their political agenda, they have to develop the critiques of their oppression. It implicates understanding the powers shaping technology and recognizing the ways online structures can be adopted to form political forces.

Technofeminism. Wajcman (2004; 2010) developed a critical framework called Technofeminism that views technology as "both a source and consequence of gender

relations" (p. 10). It addresses the relationship between technology and gender as one of reciprocal shaping (Wajcman, 2010). She argued that technological innovations are constructed within the social circumstances where they take place, taking into consideration geographical location, nationality, class, race, sexuality, and ethnicity as important variables when examining men's and women's experiences in the technoscience. This point of view is supported by many scholars who invited cyberfeminism to consider looking into who is behind the creation of the programs and platforms; who funds them; do they mirror and transfer gendered practices, real-life experiences, and systems of oppression; who uses these technologies and why; how do they use them (Eudey, 2012; Gajjala & Ju Oh 2012; Lagesen, 2008).

Wajcman (2010) noted that revolutions in online spaces do not create new societies, but they change the rules and terms in which social, political, and economic relations are executed. She emphasized that technology is "shaped by men to the exclusion of women" (p. 10). Wajcman indicated that the male dominance of the technological field has an impact on its innovation which positions women as passive receivers of technologies they did not participate in creating (Puente, 2008). Wajcman called for supporting the social mechanisms needed to promote full inclusion of women in the use and production of technology (Puente, 2008).

Creativity. Hawthorne and Klein (1999) perceive creativity as a vital element in CyberFeminism. It opens up new ways for women to voice their concerns and for collaborative work. The cyberworld is constantly remaking itself and mirroring the culture in which it happens. The freedom, non-hierarchical, instant, and ungoverned characteristics of the cyberworld provides feminists with the opportunity to challenge

patriarchy by pushing imagination and language to the limits (Fletcher, 1996). It is a

space where women can write, blog, and create programs and games that are relevant to

them (Collingwood et al., 2012; Eudey, 2012).

Literature Review Search Procedures

Five databases were identified to conduct a literature search: JSTOR, PsycInfo,

Communication and Mass Media Complete, Eric, and Education Source. To help focus

the initial search, a combination of keywords was used to go through each database such

as women activism, feminism, feminist, women, women empowerment, technology,

social media, online spaces, online activism, cyber activism, information and

communication technology, and mobile phones. To narrow the search, results were

limited to scholarly articles published within the last 10 years. An audit trail was created

to document the search results. Table 1 presents a summary of the audit trail.

Table 1

Summary of the Audit Trail

Database	Number of Hits
JSTOR	61
PsycInfo	424
Communication and Mass Media Complete	641
Eric	77
Education Source	85
Total	1288

To obtain a representative sample of the total number of related articles in the

databases, the Table of Sample Needed for a Search Using Sampling Theory created by

Onwuegbuzie and Frels (2016) was used. For example, for every 100 articles found, 80

abstracts should be read (Onwuegbuzie & Frels, 2016, p.102). After that, the reading process was initiated to remove duplicates, and select articles that might relate to the research topic. This step reduced the articles' number to 130. The selected articles were imported to an Excel Sheet to organize the article title, article author(s), publication year, type of article (empirical, conceptual), research method, region, theoretical framework, abstract, selected/deselected, selected/deselected rationale, possible themes, and article citation. Women's empowerment is defined as: "Process by which women gain power and control over their own lives and acquire the ability to make strategic choices" (European Institute for Gender Equality, 2020). The selection/deselection process followed was guided by four questions to put together the list of articles directly related to the research topic:

1. Does this article address women's empowerment?

2. Does this article address the implementation of ICT tools as a means to women's empowerment?

3. Does this article help me understand negative/positive effects of the implementation of ICT tools in women's lives?

4. Does this article address women's activism in MENA?

This process yielded a total of 64 articles: 1 mixed, 35 qualitative, 8 quantitative, and 20 conceptual. Additional articles and books that were collected during the mining of the literature were added to the list. These resources came from the references lists of some articles, some of them I collected during doctoral classes etc. All the articles were analyzed using a conventional content analysis. It relies on the analysis of the chosen text through the different cycles of coding and identifying themes or patterns (Hsieh &

Shannon, 2005). As the researcher immerses herself in the data, it facilitates the emergence of new insights (Kondracki & Wellman, 2002). A descriptive coding process of five cycles was followed (Saldaña, 2013). The analysis procedures were as follows: (a) finding the significant statements, (b) finding the clusters of meaning, (c) theming, (d) hierarchical reordering, and (f) core themes.

The coding process yielded 13 categories: social media, blogging, organized women's cyberactivism, mobile phones, online abuse, gender digital divide (which included ICT tools, patriarchy, and gender roles, and access does not necessarily translate into use), women's issues in the MENA region, women activism in the MENA region (which included Saudi Arabia, Iran, and Morroco), women activism in the Arab Spring (which included women of the Jasmine Revolution: Tunisia, marching towards Tahrir Square: Egypt, Revolutionary Damascene Roses: Syria, The Iron Woman of Taghir Square: Yemen), women in the Algerian Independence War, Contesting the Algerian Family Code, Standing up against Terrorism in Algeria.

Four core themes emerged from these categories: (1) ICT Tools and Women Activism, which included social media, blogging, organized women's cyberactivism, and mobile phones. (2) Troubles in Cyberutopia, consisting of online abuse, and gender digital divide. (3) ICT and Women Activism in the MENA Region which encompassed women's issues in the MENA region, women activism in the MENA region, and women activism in the Arab Spring, and (4) Women Activism in Algeria combining women in the Algerian independence war, contesting the Algerian family code, and standing up against terrorism in Algeria. These categories and themes outlined the literature review of this research study as follows:

1. ICT Tools and Women Activism

    a. Social Media

    b. Blogging

    c. Organized Women's Cyberactivism

    d. Mobile Phones

2. Troubles in Cyberutopia

    a. Online Abuse

    b. Gender Digital Divide

        i. ICT Tools, Patriarchy, and Gender Roles

        ii. Access does not Necessarily Translate into Use

3. ICT and Women Activism in the MENA Region

    a. Women's Issues in the MENA Region

    b. Women Activism in the MENA Region

        i. Saudi Arabia

        ii. Iran

        iii. Morocco

    c. Women Activism in the Arab Spring

        i. Women of the Jasmine Revolution: Tunisia

        ii. Marching Towards Tahrir Square: Egypt

        iii. Revolutionary Damascene Roses: Syria

        iv. The Iron Woman of Taghir Square: Yemen

4. Women Activism in Algeria

    a. Women in the Algerian Independence War

b. Contesting the Algerian Family Code

c. Standing up against Terrorism in Algeria

Research Questions

The following research questions guided this study:

RQ1: What is the impact of Twitter on women's activism during the Hirak?

RQ2: How does Twitter provide opportunities for women to articulate their identities during the Hirak?

RQ3: How does Twitter allow Algerian women to establish new roles of political participation during the Hirak?

Delimitations

A delimitation of this study might be the chosen hashtags to mine the data. Other hashtags have been used to report and discuss the Hirak such as: #سلمية, #protests, #peace, #الجزائر, #bouteflika, #hope, #espoir … etc. Another delimitation could be carried by the data mining timeline.

Limitations

Limitations of Conducting Online Research

Privacy settings can limit the researcher's access to content according to how much users are willing to share publicly in online spaces (Gerber et al.; Skalski et al., 2017). Users have the ability to modify content based on sites' design and capacity (Gerber et al., 2017). Additionally, users have different privacy settings and might only make a segment of their content accessible to select members (Skalski et al., 2017).

Sampling presents a challenge in acquiring content through online platforms (Skalski et al., 2017). When mining data from online blogging and microblogging

platforms, such as Twitter, some accounts are abandoned, are restricted, and are nontraditional (Li & Walejko, 2008; Skalski et al., 2017). The most problematic accounts are the spam accounts or web robots that generate automated content and boost the page rank in search engines (Ahmed et al., 2018; Boyd & Crawford, 2012; Li & Walejko, 2008; Skalski et al., 2017).

Social media platforms such as Facebook and Twitter have weak archiving and search functions, which makes it difficult for researchers to access older data (Boyd & Crawford, 2012). Big data sets are likely to have outrages and losses, which makes it impossible to determine how much data will be excluded from the data collection (Ahmed et al., 2018; Boyd & Crawford, 2012). Finally, data extracted from social media platforms might be skewed as social media developers disclose a fraction of their data available to the public through APIs, which makes it hard to understand the sample (Boyd & Crawford, 2012).

Limitations of Qualitative Research

Generalization. It refers to the researchers limited ability to generalize her research findings to other population in different settings through time (Benge et al., 2016). Qualitative researchers typically do not seek generalizable answers (Salmons, 2016). They are more interested in generating an understanding a nuanced and distinctive phenomenon (Salmons, 2016).

Researcher's Bias. Accounting for biases in data collection have been a critical aspect in research (Onwuegbuzie & Leech, 2007). In big data sets, it requires understanding the properties and limits of the data set no matter how big the size is (Boyd & Crawford, 2012). It is also important to acknowledge how the researcher's identity and

perspective inform the data analysis (Boyd & Crawford, 2012). To address the researcher's bias in this study, she thoroughly explored and understood where datasets are coming from and what are the limitations of each dataset (Boyd & Crawford, 2012). A reflective journal was kept throughout the study in which the researcher addressed the possible biases (Harrison et al., 2001; Ortlipp, 2008).

Assumptions

Because the data collection is vague, the researcher cannot assume to have generated a full data set for the chosen hashtag (Boyd & Crawford, 2012). Data extracted from social media platforms do not represent all people, and social media users do not represent the global population (Ahmed et al., 2018; Boyd & Crawford, 2012). Researchers cannot assume that accounts and users are the same (Ahmed et al., 2018); some users are "active" who post regularly, and some users are "listeners" who read (Crawford, 2009).

Organization of the Study

The current research study is organized in five chapters: (1) Introduction, (2) Literature Review, (3) Methodology, (4) Findings, and (5) Discussion of Findings. Chapter I presented the background of the study, purpose of the study, significance of the study, the statement of the problem, the theoretical and conceptual frameworks, the literature review Search procedures, delimitations, limitations, and assumptions that guided this investigation. Chapter II introduced a review of the literature related to the topic of the study, specifically the following elements: (a) ICT tools and women activism; (b) troubles in cyberutopia; (c) ICT and women activism in the MENA region; and (d) Women activism in Algeria. Chapter III consisted of the methodology and how the

Qualitative E-Research Framework was adapted. This included discussion of the research questions, the research design, data collection, data analysis, and ethical considerations when conducting research in online spaces. Chapter IV explored the data collection and analysis, and Chapter V discussed the major findings within the review of the literature and the theoretical framework, implications in field of education, and future research. Chapter VI covered the researcher's closing thoughts.

CHAPTER II

Review of the Literature

ICT Tools and Women Activism

Social Media

Social media has witnessed an intensified digital explosion of women utilizing these outlets to raise awareness about women's rights and advance gender equality (Alhayek, 2016; Baer, 2016; Eslen-Ziya, 2013; Jackson, 2018; Rentschler & Thrift, 2015; Turley & Fisher, 2018). The speed, interactivity, and flexibility of social media platforms makes them popular tools for activism (Altuwayjiri, 2017; Eslen-Ziya, 2013; Schuster, 2013). They are easily accessible and low in cost, and they are considered as relatively safe spaces for women to express themselves (Schuster, 2013). Social networking tools offer participatory and non-hierarchical communication (Eslen-Ziya, 2013). Social media is deployed to mobilize, advocate, and organize social and political movements (Alhayek, 2016; Eslen-Ziya, 2013; Gheytanchi & Moghadam, 2014; Jackson, 2018).

In some countries, women are restrained from accessing the public sphere, which alienate them from political and social participation (Altuwayjiri, 2017; Guta & Karolak, 2015; Jarbou, 2018; Radsch & Khamis, 2013; Turley & Fisher, 2018). Consequently, women have turned to social media by creating a virtual public sphere to compensate for their lack of power in the physical space (Altuwayjiri, 2017; Eslen-Ziya, 2013). In cultures like Saudi Arabia, where the society is strictly segregated, social media has played a big role in raising women's awareness about politics and women's rights (Altuwayjiri, 2017; Jarbou, 2018). It allowed women to take part in political debates without being identified or challenging the status quo (Altuwayjiri, 2017; Guta &

Karolak, 2015; Jarbou, 2018; Newsom & Lengel, 2012; Schuster, 2013). In a study

conducted by Guta and Karolak (2015), female participants adopted multiple approaches

of negotiations. For example, they used nicknames, concealed their personal images, and

refrained from using their family names. This way, women were able to criticize, express

themselves, and discuss politics (Altuwayjiri, 2017; Harris, 2008).

In times of sociopolitical transformations, social media allowed women to

circulate messages, organize, and mobilize themselves (Gheytanchi & Moghadam, 2014;

Jackson, 2018; Rentschler & Thrift, 2015; Turley & Fisher, 2018; Yuce et al., 2014;

Zlitni & Touati, 2012). Social media gave women the platform they needed to talk about

their experiences and connect with peers (Alhayek, 2016; Gheytanchi & Moghadam,

2014; Radsch & Khamis, 2013; Rentschler & Thrift, 2015). This network of connectivity

helped create a culture of support and response to women's issues (Odine, 2013;

Rentschler, 2014). Online activism through social media put women's issues at the center

of events where they cannot be ignored anymore (Altuwayjiri, 2017; Radsch & Khamis,

2013).

Young feminists exploited social media to denounce the sexual violence, sexism,

and harassment they face daily (Eslen-Ziya, 2013; Jackson, 2018; Rentschler, 2014).

Young feminists understood the power of sharing information and building communities

online for their activism (Jackson, 2018; Rentschler & Thrift, 2015, 2015; Schuster,

2013). Those online practices enabled them to impact politics on a micro level and voice

their experiences with rape and sexism to the political debate (Jackson, 2018; Odine,

2013; Schuster, 2013). For example, in the case of the Steubenville rape, a local

criminology blogger gathered information about the case from Twitter, Facebook, and

Instagram and presented them as evidence against the young man accused of raping the young woman (Rentschler, 2014). According to Rentschler (2014), "Today feminist bloggers utilize social media in order to respond to rape culture and hold accountable those responsible for its practices when mainstream news media, police and school authorities do not" (p. 67).

Women around the world deployed Facebook to advocate their rights. During the Syrian revolution, female activists took advantage of Facebook to share stories about women's struggles and to sponsor female refugees and collect donations to support them (Alhayek, 2016). Feminist groups launched Facebook campaigns to raise awareness about forced marriages among female Syrian refugees in Jordan (Alhayek, 2016). In 2011, the Tunisian Personal Status Code (PSC) faced threats of change from religious parties running for the Constituent Assembly elections. As a response to this menace, women relied on Facebook to boost their visibility and make sure their actions and ideas were widely spread. They created Facebook pages addressing the issue, calling for the protection of women's rights and to educate people about the dangers of the religious party's hidden agendas (Zlitni & Touati, 2012). Feminists also resorted to Facebook and Tumblr memes to respond to discourses of misogyny. During the 2012 U.S. elections, a stream of memes titled "Binders Full of Women" were used to shed light on the presidential candidate Mitt Romney's incompetence to improve the Republican Party's already flawed reputation on women's rights (Rentschler & Thrift, 2015).

Twitter hashtags are good examples to coordinate for events or to connect one's tweets to a larger cause or discussion (Jarbou, 2018; Latina & Docherty, 2014; Skinner, 2011.; Yuce et al., 2014). Hashtags facilitate campaigns' accessibility to a bigger

audience and are immediate and easy to track (Turley & Fisher, 2018). Yuce et al. (2014) studied the diffusion of hashtags to examine the online collective action (OCA) process of formation. They analyzed the campaign OCT26Driving advocating for women's right to drive in Saudi Arabia. The researchers collected data from Twitter and analyzed the dominant hashtags dedicated to the campaign: viz., "#oct26driving" and "# 26_ قيادة أكتوبر." Their results revealed a surge in Twitter activity after the website campaign was hacked. This shows that Twitter was an alternative platform for online collective actions. Additionally, the use of English hashtags helped draw transnational and interorganizational attention and support. Twitter is also a medium for women to stay politically informed. According to Altuwayjiri (2017) Saudi women had little association with politics, had no knowledge about their rights, and were discouraged from venturing into politics. However, with the rapid spread of Twitter, Saudi women gained political awareness, had a better understanding of their status, and started to engage in political debates (Altuwayjiri, 2017). In this case, Twitter is perceived as a platform to a democratic society (Harris, 2008).

In 2012, Laura Bates started #everydaysexism, which she linked to a Twitter account, for women to share their experiences about sexism, harassment, and misogyny (Turley & Fisher, 2018). Similarly, #YesALLWomen was created in 2014 to address violence against women on an international level (Baer, 2016). Female celebrities also utilized hashtags to reach to their vast scope followers to endorse women's rights (Mendes et al., 2018). For example, actress Emma Watson shared #heforshe to urge men to support women's rights and the fight for equality (Turley & Fisher, 2018). Women used Twitter to create networks where they can share their experiences to support each

other (Hosni, 2017; Lewis et al., 2013; Odine, 2013; Radsch & Khamis, 2013). During

the Egyptian revolution, women reached out via Twitter to Mona Al-Tahawy, a high

profile Egyptian-American journalist, to voice their experiences about participating in the

protests (Hosni, 2017).

"Speak to tweet" was a convenient tool for Egyptian protesters, including

females, during the revolution. Through this tool, Egyptians leave a voice recording,

which is automatically transcribed and posted as messages on Twitter. Then, a group of

volunteers would gather the messages and translate them into multiple languages to post

on a website called "Alive in Egypt" (Gheytanchi & Moghadam, 2014).

According to Odine (2013) women are encouraged to use social media to voice

their concerns and advocate for their rights instead of waiting for governments to

represent them. Female activists perceive social media as a game changer for gender

equality and consider it as a powerful instrument to push women's issues into the public

agenda (Odine, 2013). The creativity in the use of social media has morphed into an

arena of awareness, participation and empowerment (Hosni, 2017; Lewis et al., 2013).

Blogging

Taylor (2011) noted that blogs were oppositional platforms where women's issues

were contested, negotiated, and rewritten. Blogs were considered a type of

communication theoretically easily accessible by all and praised to enable the

marginalized to express themselves (Hosni, 2017; Keller, 2012; Rentschler, 2014;

Shirazi, 2012; Somolu, 2007; Taylor, 2011). According to Coleman (2005): "As a vehicle

of self-representation, blogs diminish people's need to be spoken for by others" (p. 276).

The anonymity feature in blogging encouraged women to share their experiences and

views openly and honestly (Guta & Karolak, 2015; Somolu, 2007). Through self-generated content, women sought to refigure concepts around gender and provide resources, support, and textual community for other people to intervene and contribute to women's issues (Keller, 2012; Somolu, 2007; Taylor, 2011). In her study, Keller (2012) emphasized how feminist blogospheres embrace women from different ideologies and add a layer of diversity into women's issues. One of Keller's participants stated: "you can read poems by a Saudi Arabian feminist or a Jamaican LGBT activist or the thoughts of an American woman in Afghanistan and a bunch of other scenarios . . . and while it might not be perfect, it's definitely great to have that access" (p.143). Shirazi (2012) noted the number of Iranian weblogs on women's issues have increased, and women have become the leading bloggers. Female bloggers analyzed the discriminatory aspects of the family laws. They addressed issues such as stoning, polygamy, temporary marriage, unilateral divorce, and the unfair inheritance laws.

With their immediate publicity, blogs allowed the personal to become political and provide virtual communities and support systems (Rentschler, 2014; Taylor, 2011). Women perceived these platforms as a new public sphere where they can gain influence in society (Guta & Karolak, 2015; Radsch, 2012; Shirazi, 2012). CNN described Arab women bloggers as "agents of change" in their societies (Guta & Karolak, 2015). For example, in Saudi Arabia, blogs such as Saudiyat, women2drive campaign, and Saudi Eve were models of how female bloggers were contributing to the social change in their countries (Guta & Karolak, 2015; Yuce et al., 2014).

Blogging offerd an alternative platform for women to become active creators of their own stories and experiences, as well as disseminators of the knowledge that is important to them (Somolu, 2007). Somolu (2007) found that 65% of female African bloggers drew from their personal experiences to write about topics like politics and feminism. This would translate into a feeling of empowerment, which is pivotal for social and political change (Guta & Karolak, 2015; Somolu, 2007). Taylor (2011) conducted a study to explore how female bloggers publicly perform and define their singleness as a personal and a political strategy of re-signification. She argues that blogs offered single women a platform to be heard and gave them a form of validation they could not find anywhere else.

Somolu (2007) argued that blogging promotes a positive image of women to compensate for the low number of females working in media and the lack of representation of women's issues in mainstream media. Feminists sough blogs to respond to rape culture and educate girls about sexual violence when schools and government authorities failed to do so (Rentschler, 2014). Blogospheres were also a more democratic alternative in times of political uprisings when mainstream media is criticized for only serving the elite's interests (Keller, 2012; Shirazi, 2012; Tufekci & Wilson, 2012). Blogs were characterized as reachable, accessible, and immediate platforms for political dissent (Maamari & Zein, 2014). For example, Tunisian female blogger Lina Ben Mhenni was the first one to report in her blog about the fruit vendor's suicide, which sparked the Tunisian Revolution (Radsch, 2012). Similarly, Dalia Ziadi, a female Egyptian blogger, was a pioneer in the Egyptian revolution (Radsch, 2012; Radsch & Khamis, 2013). Additionally, Egyptian Islamist women found refuge in blogs to express themselves

without compromising "their pious dressing nor their worthy-of-covering voices" (Hosni, 2017, p.203). As for the Syrian revolution, Razan Ghazzawi, a female Syrian activist, blogged extensively about Bashar al-Assad regimes' human rights violations (Hosni, 2017).

Organized Women's Cyberactivism

Online environments allowed women to not only be part of the political uprisings, but also build and monitor the emerging political institutions and promote democracy concepts and practices (Boumlik, 2017; Boumlik & Schwartz, 2016; Irving & English, 2011; Martin, 2015; Stephan, 2013). Boumlik and Schwartz (2016) examined the role of information and communication technology (ICT) tools in the nonprofit sector during the Tunisian Jasmine Revolution. The researchers studied a nongovernmental organization (NGO) called Al Bawsala founded and led by the female cyber social activist Amira Yahyaoui. The role of this NGO was to situate citizens at the center of political actions, to establish relationships with elected representatives and decision-makers, and to defend the notion of social progress and citizen empowerment. Amira Yahyaoui and her NGO used online platforms to raise awareness about civic and political engagement among adults in Tunisia. They also played a central role in the peaceful transition of power, the revision of the constitution, and the post revolution dialogue.

Internet accessibility provided feminist nonprofit organizations with the opportunity to fundraise, network, educate, and mobilize themselves (Alhayek, 2016; Hassanin, 2009; Irving & English, 2011; Mudhai et al., 2016; Yin, 2018). These organizations rely on online platforms to provide "nonformal (workshops and short courses) and informal (everyday) adult learning strategies that are politically attuned.

They provide educational programming; social movement learning about advocacy,
change, and feminism; literacy services; and mentoring and coaching." (Irving & English,
2011, p. 263).

Online organizations offered women a virtual community to sustain and
consolidated their advancement (Abraham, 2009; Hassanin, 2009; Kannengiesser, 2011).
Through emails, litservs, websites, and social networking sites, online organizations
optimized their visibility and networking opportunities to advance women's issues
(Kannengiesser, 2011). Yin (2018) explored an online nonprofit organization advocating
female migrants' rights in China called Jianjiao. The organization published "narratives,
poems, commentaries, analysis, and discussions, many of which expose, and critique
structural inequalities female migrant workers face in prevailing economic and cultural
regimes" (p. 1229). To encourage members to voice their concerns and views, Jianjiao
organized online writing competitions on topics about work environment and women's
rights. The organization succeeded in offering lesbian workers a cyberspace to write
about their experiences.

Women took their activism to online spaces to create a collective identity, and
establish connectivity (Eltantawy & Wiest, 2011; Stephan, 2013). Stephan (2013) noted
how the Arab Women's Solidarity Association United (AWSA United) created an online
organization to bring women throughout the spectrum together. According to her
findings, AWSA United offers a cyberspace where members are able to establish a
collective identity that challenges cultural norms constructed around women in the Arab
world. AWSA United also provides a platform for women to stay informed about politics
on the national and international level.

Feminists sought cyberactivism to fight violence against women (Jackson, 2018; Kannengiesser, 2011; Mudhai et al., 2016; Puente et al., 2017; Yin, 2018). The Association for Progressive Communications (APC) Women held the "16 days of activism against gender-based violence" online campaign to condemn violence (Kannengiesser, 2011). Feminist organizations use their websites to support abused women. They offer legal advice, support groups, and raise awareness about violence (Brownlee, 2017; Puente et al., 2017). However, Puente et al. (2017) emphasized the need to promote accessibility and participation. On a similar note, Irving and English (2011) highlighted the necessity for feminist's websites to improve. They stated that online feminist organizations lack the ability to maintain their presence.

Mobile Phones

The widespread use of mobile phones, especially in countries that have limited access to the internet, manifested in an increase of studies on these devices and women empowerment (Bhandari, 2019; Comfort & Dada, 2009; Kyomuhendo, 2009; Macueve et al., 2009; Munyua, 2009; Sanya, 2013). Mobile devices have empowered women by boosting their participation in economic and social development and by promoting informed decision-making (Kyomuhendo, 2009; Liamputtong et al., 2016; Macueve et al., 2009; Sanya, 2013; Ullah, 2009). Sanya (2013) explored how mobile phones in rural Kenya encouraged civic engagement among women. She argued that introducing mobile devices helped create a virtual and a physical feminist community. Those elements played a crucial role during the constitutional review process under the Constitution of Kenya Review Commission Act. Organizations like FIDA Kenya and Warembo ni Yes deployed mobile phones to reach out to women. They used text messages to spread

results and views on the debates over landownership and reproductive rights. Sanya emphasized the importance of mobile devices and feminist organizations to strengthen women's voices, boost grassroots feminist work, and introduce feminist leaders advocating gender justice.

With the significant growth of the mobile phone industry, women use these devices for personal and professional gain. In rural areas, women rely on their phones to establish and run businesses to generate income and support their families (Comfort & Dada, 2009; Macueve et al., 2009; Munyua, 2009; Ullah, 2009). This financial stability gives them confidence, respect and dignity within their family and community (Kyomuhendo, 2009; Ullah, 2009). For example, mobile phones contributed to businesswomen's empowerment in Kenya (Munyua, 2009). These devices gave female entrepreneurs a sense of control, improved their networking, facilitated fund transactions, created collaboration opportunities, and built a social support system among women (Kyomuhendo, 2009; Liamputtong et al., 2016; Macueve et al., 2009; Sanya, 2013). Additionally, mobile devices encourage women to learn new skills and allow them to stay informed about current events and issues that concern them (Liamputtong et al., 2016).

Phone applications emerged as new supportive devices to combat gender-abuse (Rentschler, 2014). Applications like Women Fight Back, Watch Over ME, iMatter, Not Your Baby, and FindSisterhood offer women spaces where they can learn and address issues like safety and sexual harassment. Women utilize other mobile phone's features to take action against violence. Hollaback!, a global organization seeking to end harassment, provides training to individuals and communities on how to deploy mobile phone' tools (such as cameras and recorders) to document, map and narrate harassment they witnessed

or experienced and disseminate the information on social media (Rentschler, 2014). Harassmap is a phone application launched in Egypt that utilizes online and offline mapping to allow women to report all types of sexual harassment, groping, catcalls, to full-on rape (Abdelmonem, 2015; Ali et al., 2015; Becker, 2012; Sara, 2015; Skalli, 2014). Later on, Harassmap took part in launching an online campaign to end sexual harassment in Egypt and Lebanon through #endSH (Sara, 2015). Harassmap inspired other application on the MENA region such as Ramallah Street Watch, Safe Streets Yemen and Resist Harassment Lebanon (Dytman-Stasieńko, 2018). Similarly, women during the Syrian revolution used their phone's technologies to document their activism. According to Alhayek (2016), Female activists utilized their cameras to film and photograph their protests and to document Bashar's brutality. Female activist also used their phones to report on Syrian women struggles and stories in refugee camps (Alhayek, 2016).

Women throughout the world used ICT tools to their advantage. As this section illustrated, women used social media platforms to compensate for their lack of power in the public sphere, and to increase their political participation. Feminists blogged to fight gender-based violence and offered online spaces for women to voice their concerns. In rural areas, women deployed mobile phones to achieve economic stability and gain social status. Female activists joined forces and created online organizations to support the oppressed. However, ICT tools are a double-edged sword. Women who seek technology to advance their cause are exposed to cyber abuse and are bound by their socio-cultural status (Eckert, 2018; Tafnout & Timjerdine, 2009). Women also suffer from a gender

digital divide, and even when the technology is available, accessibility is not guaranteed (Mumporeze & Prieler, 2017; Ono & Zavodny, 2007).

Troubles in Cyberutopia

Online Abuse

Are online spaces a utopia for feminism? Many researchers argued that digital spaces are not complete safe havens for women (Brophy, 2010; Han, 2018; Mantilla, 2013; Shaw, 2014; Turley & Fisher, 2018). Online spaces are an environment for social and cultural reproduction, and they reflect real-world patterns (Eckert, 2018; Lewis et al., 2016; Puente et al., 2017). Women are regularly attacked, trolled, and bullied online for expressing their opinions and experiences of sexism and gender equality (Eckert, 2018; Lewis et al., 2016; Turley & Fisher, 2018). According to Boynton, (2012), "The mobilizing power social media creates also enables mobbing, bullying and harassment" (p. 539). Cyberspaces carry the same gender inequalities as the offline world (Han, 2018; Lewis et al., 2016; Turley & Fisher, 2018). Shaw (2014) argues that online sexism derives from a position of privilege established through the same historical events that made offline spaces a particular form of masculine culture.

In their study, Duggan et al. (2014) found that 73% of internet users have witnessed online harassment and 40% have personally experienced it. They also revealed that young women experience particularly severe forms of online abuse. This occurs in many forms, including flaming, which means posting insults, mostly includes profanity and other offensive language on social networking platforms (Lewis et al., 2016). Trolling is when someone attempts to disturb a discussion space (Herring et al., 2002). Provocation is a form of antagonism that stimulates passionate responses (McCosker,

2017). Ebile which represents the spread of hostile misogynist rhetoric on the Internet (Jane, 2014).

Cyber harassment is more frequent on social networking sites (Duggan et al., 2014). Lewis et al., (2016) examined the online abuse of feminists in the United Kingdom. They found that most women experienced multiple types of abuse on a daily basis. The participants revealed that they witnessed the highest level of abuse on Twitter, and the more active they were increased their risk of being abused. Similarly, Eckert (2018) investigated women's experiences with online harassment from Germany, Switzerland, the United Kingdom, and the United States who blog about topics such as women's issues, sexual politics, and family. According to her study, 79% of participants reported negative experiences on blogging and social networking platforms. Her interviewees received comments like "menhater," "men-hating bitch," "CIA-bitch," "Feminazis," "bitch," "Jewish bitch," "ugly," and "stupid" (p. 1292). They also received violent threats such as; "deserve to be raped," and "throw a bomb on your head" (p. 1292). Mantilla (2013) elaborated on how women across the spectrum are harassed. She talked about how the feminist blogger Melissa McEwan received rape and death threats, how the gaming community bullied Anita Sakeesian for speaking up against misogyny in gaming, and how Lindsey West was trolled on her social media because she opposed rape jokes.

Cyber abuse is not acknowledged as a crime (Citron, 2014; Eckert, 2018). Since online and offline experiences are intertwined, Eckert (2018) argues that investigating online abuse should not be restricted to cyberspace, and it should extend to the offline crimes resulting from one's cyber activities. Cyber harassment and stalking demonstrated

how new technologies facilitate acts of violence in the traditional sense and generate new forms of violence against women (Puente et al., 2017). According to Duggan et al. (2014), 18% of internet users are stalked. For example, a female blogger from the United States discussed how people threw garbage on her house and put her name, phone number, and address on a dating website (Eckert, 2018). Mantilla (2013) notes that online gendertrolling is similar to offline harassment as they both seek to patrol gender boundaries and use insults, threats of violence and rape, and hate to keep girls and women out of the male-dominated sphere.

To deal with online abuse, women developed some response strategies. They pre-screen and ban disruptive users and they expose the abusers on social media and other platforms. A select few women bloggers charged a fee on the haters to access their blogs, and they might even call the police. Some of them avoided topics that might cause online abuse, change their usernames, or delete their profiles (Duggan et al., 2014; Han, 2018). The threats of online abuse forced women to self-censorship and online abstinence. Many female journalists and bloggers closed their blogs or stopped writing for the public (Shaw, 2014). This self-censorship disturbs the democratic potential of online public spaces and keeps women from being active online (Eckert, 2018; Mantilla, 2013).

Gender Digital Divide

ICT tools are considered a crucial element for sustainable and fair development (Bhandari, 2019; Hilbert, 2011; Novo-Corti et al., 2014; Thompson & Paul, 2016). Buskens (2009) notes: "ICTs deserve serious attention. Not to grant them this attention could result in missed opportunities for women, and risk ICTs reinforcing, unintentionally, women's discrimination and disempowerment" (p. 7). Researchers

across the spectrum have showed concern about the widening gender digital gap as women have less accessibility to ICT tools compared to men (Bhandari, 2019; Hilbert, 2011; Macueve et al., 2009; Mumporeze & Prieler, 2017). In both developed and developing countries, women suffer from digital inequality (Bhandari, 2019; Mumporeze & Prieler, 2017; Ono & Zavodny, 2007). ICT is a domain where women are most at risk for marginalization (Hilbert, 2011; Mumporeze & Prieler, 2017). The gender digital divide adds to the already existing gender inequalities when it comes to job opportunities, class, education, decision-making, health, financial stability, and economic growth (Asiedu, 2012; Hilbert, 2011; Mumporeze & Prieler, 2017; Sarkar, 2016; Webb, 2016).

ICT Tools, Patriarchy, and Gender Roles. Garcia (2011) claimed that ICT tools reinforce gender structures. Feminist theories argued that the digital divide is caused by the male-dominance of the ICT sector (Garcia, 2011; Hilbert, 2011; Mumporeze & Prieler, 2017; Tafnout & Timjerdine, 2009). Women are severely underrepresented in this field (Allen et al., 2006; Mbambo-Thata & Moyo, 2014; Omamo & Aluoch, 2014). Lee (2002) explained that this underrepresentation is related to the fact that men outnumber women in Science, Technology, Engineering, and Mathematics (STEM) education. Johnson's (2000) "hidden curriculum" concept gives a framework to this notion:

> Hidden curriculum is a concept used to describe the often unarticulated and unacknowledged things that students are taught in school. This is distinct from the publicized curriculum that defines what students are supposed to study and learn – subjects such as mathematics and literature. The hidden curriculum is an important issue in the sociological study of how schools generate social inequality. Students who are female, for example, or who come from lower-class

families, or who belong to subordinate racial or ethnic categories, are often treated

in ways that create and reinforce inferior self-images as well as low aspirations

and expectations for themselves (p. 145).

Here, the social and cultural constructs play a key role. Gender roles are

constructed by social and cultural norms, and gendered practices create environmental

conditions for women. Hence, in a patriarchal society, gender stereotyping in the ICT

sector discourages women from seeking an education and a career in this field (Mubarak,

2014; Wilson, 2003). The lack of role models, domestic responsibilities, the work

environment, and media add to the gender stereotyping effects on women's career choice

(Mumporeze & Prieler, 2017; Wilson, 2003). Mbambo-Thata and Moyo (2014)

investigated women's experiences and career choices in a computer science program in

Zimbabwe. They revealed that the teacher–student relationship and classroom

environment reflected the social and cultural norms and created a gendered learning

environment. Consequently, it created a gendered distribution of careers in the computer

industry as female graduates held systems support personnel or administrator positions;

meanwhile, male graduates took software design and development, and networking jobs.

The work environment in the ICT sector is unfriendly toward female employees. It is

aggressive, ageist, and they do not accommodate women with children and pregnant

women, which makes it hard for them to enter and maintain their jobs (Omamo &

Aluoch, 2014; Wilson, 2003). Omamo and Aluoch (2014) examined the work

environment in the ICT sector in Kenya. They noted that this sector is tailored for male

workers who show greater commitment to their careers over childcare, family,

households, and social activities. They also found the sector to be tainted with stereotypes

and discrimination. Women were perceived as incapable putting them under the pressure of constantly proving themselves. Mbambo-Thata and Moyo (2014) and Omamo and Aluoch (2014) all suggested that to achieve equality in the ICT sector, the gender barriers preventing women from venturing in this domain need to be studied and taken into consideration in order to be broken.

Some researchers argue that ICT tools added a new level to men's power and control over women and reinforced subordination (Garcia, 2011; Potnis, 2016). In 2004, two Saudi sheiks issued a fatwa (a religious ruling) forbidding women from using the internet unless chaperoned by a male guardian, and a man's response to this fatwa was as follows:

> This fatwa is actually correct. If you can get past your initial feelings about it and think, you'll find out that this fatwa makes perfect sense and is consistent with Islam. The point is that the internet, which we can all agree has many negatives attached to it i.e. child pornography, pornography as well as countless other examples of immoral behavior that is readily available to anyone that asks for it. The fatwa then makes sense because it helps our women, the best and purest on the face of this earth, stay away from any threat of corrupting their purity. I, for example do not allow my fiancé to view the internet unless I'm present. She and I both fully understand that the internet is a great invention, which offers positive aspects, but we're well aware of the negatives as well (Stephan, 2013, p. 86).

Potnis (2016) noted how male-favoritism puts women in a disadvantaged position compared to men. For example, Mubarak (2014) found that men are given priority access to technology devices according to one female participant:

It is not important for me to use the computer since I must leave the device once my brother wants to use it, my dad says to me leave it for him and you can use it another time to avoid a quarrel (p. 36).

Similarly, Tafnout and Timjerdine (2009) realized that some of their female participants needed permission from their husbands on how and when they can use their devices.

Women's status in the public sphere limits their accessibility outside their households. In patriarchal societies, women lack power in public spaces making internet spaces male-dominated territories, which widen the digital gender gap (Mumporeze & Prieler, 2017; Tafnout & Timjerdine, 2009). For example, women are discouraged from using internet cafes, which are considered as unsafe or inappropriate for women, or stay after class to use computer labs in schools and universities (Mubarak, 2014).

Access does not Necessarily Translate into Use. Ono and Zavodny (2007) argue that most people are likely to have technology; however, it does not guarantee that all demographic and socioeconomic groups will use them. Researchers emphasize that simply providing equal resources does not ensure equal outcome (Ben Hassine, 2014; Mbambo-Thata & Moyo, 2014; Mubarak, 2014; Omamo & Aluoch, 2014; Somolu, 2007; Taylor, 2011; Webb, 2016). Mumporeze and Prieler (2017) examined the factors that contribute to the gender digital divide in Rwanda. Their findings revealed that even though both their male and female participants owned a home computer, women showed

less accessibility. Domestic duties prevented them from using technology as one of the female participants explained:

>As a mother of six children, I am expected to be the home keeper; I wash, clean, and cook. It is merely my responsibility to be constantly available and do everything for my family. So with this heavy responsibilities, I cannot find time to use the computer and the Internet at home (p. 1289).

Similarly, Ben Hassine, (2014) argued:

>Given this situation, what are the benefits to women of equal availability of ICTs if they do not have the same amount of use as men and 'can not freely extend their work hours, or access these tools at home until the household tasks are done and until the children are in bed'?" (p. 84).

Ben Hassine elaborated that internet and ICT tools accessibility do not alleviate women's burden of domestic chores, and socio-cultural responsibilities. These studies mirror the body of research highlighting the effect of gender roles on women's use of technology (Ben Hassine, 2014; Mubarak, 2014; Somolu, 2007; Webb, 2016).

Ono and Zavodny (2007) found gender, income, and education were predictors of technology use. The lack of digital literacy skills among women represent a barrier into the use of ICT tools (Asiedu, 2012; Bhandari, 2019; Mubarak, 2014; Mumporeze & Prieler, 2017; Novo-Corti et al., 2014; Somolu, 2007; Tafnout & Timjerdine, 2009). The use of ICTs requires basic skills which filters out women who lack them (Khan & Ghadially, 2009; Sarkar, 2016). In male-dominated societies, men are encouraged to gain new skills; meanwhile, women are pushed into domestic life (Mbambo-Thata & Moyo, 2014; Mubarak, 2014; Mumporeze & Prieler, 2017). Women are perceived as less

competent compared to men when it came to technology making them doubt their capacities (Mbambo-Thata & Moyo, 2014; Mubarak, 2014; Somolu, 2007). An additional obstacle that hinders women's utilization of technology to their advantage is the language barrier. Most tools are dominantly in English, and to navigate them women should have basic knowledge of the English language (Mumporeze & Prieler, 2017; Somolu, 2007; Stephan, 2013).

Socio-economic status also affects women's accessibility to ICT tools as most women are either poorer than men or do not possess or control their own funds to own technology devices or gain the necessary skills to operate them (Comfort & Dada, 2009; Garcia, 2011; Macueve et al., 2009; Ono & Zavodny, 2007). For example, Potnis (2016) found that women represent less than 30% in phone subscriptions in India. In some rural communities, women do not own phones and rely on their partners for communication putting them under the mercy of their husbands (Burrell, 2010; Garcia, 2011; Wyche, 2017). Many researchers agree that the use of ICT tools for women empowerment is mostly inclusive to educated women from middle and upper middle classes with high social and technical connectivity (Ben Hassine, 2014; Khamis, 2019; Newsom & Lengel, 2012; Sarkar, 2016; Stephan, 2013).

This section challenges the concept of cyberutopia. It illustrates how online spaces carry oppressive and misogynistic practices inflicted on women in the real world. Cyber harassment is a rising global concern threatening women's safety, freedom of speech, and development. ICT tools are fundamental for women's advancement; however, gender digital divides prevent them from reaching their full potential. Societies tend to create differences between women and men by designating roles and status that

restrict women's accessibility to technology. This gender stereotyping discourages women's participation in the ICT sector and holds them back from gaining the necessary skills to use technology for their advantage. Nevertheless, women around the world are resilient and ready to challenge anything that undermines their rights. In the MENA region, women rose above all these obstacles to advance their cause and act as agents of change in their countries during social and political uprisings.

ICT and Women Activism in the MENA Region

Women's Issues in the MENA Region

Women across the MENA region have been burdened with a plethora of barriers in areas, such as law, politics, education, and employment (Lim, 2018; Sadiqi & Ennaji, 2011; Shalaby, 2016). Most countries in the MENA region recognize equality between men and women but have no clear laws banning gender discrimination (UNDP, 2016). According to the Global Gender Gap Report, the overall global gender gap in the MENA region is the highest in the world (World Economic Forum, 2018). Family law and personal status codes have been the most contested legal texts in the region (Chafai, 2017; Lloyd, 2005; Moghadam & Sadiqi, 2006; Zlitni & Touati, 2012). They carry gender inequalities by restricting women's rights to marriage, divorce, child custody, and inheritance (Moghadam, 2003; Sadiqi & Ennaji, 2011; Skalli, 2011; UNDP, 2016). They embody patriarchal discriminations that are justified by religious institutions making them hard to challenge (Chaudhry, 2016; Lloyd, 2006; UNDP, 2016). Personal status codes have put women's status under male guardianship and authority (Al Lily, 2011; Skalli, 2011; UNDP, 2016). However, it is worth mentioning that multiple research

studies have debunked the idea that the unfavorable situation of women in the MENA region is related to Islam (Haghighat, 2014; Kucuk, 2013; Solati, 2017).

Women's participation in the labor force has been associated with education, delayed marriage age, and low fertility rate (Solati, 2017). Women's education in the MENA region has dramatically improved, the fertility rate has been declining, and the marriage age is increasing; however, female participation in the workforce has the lowest rate in the world (Chafai, 2017; Romie et al., 2013; Sara, 2015; Solati, 2017; Tohidi, 2016; UNDP, 2016; World Economic Forum, 2018). Female employment in the MENA region has been tainted with discriminatory practices (Sadiqi & Ennaji, 2011). Women are often paid less than men, and struggle to be taken seriously or included in important decision-making process (Odine, 2013; Sadiqi & Ennaji, 2011; UNDP, 2016). Their defined gender roles in a patriarchal society shape the work opportunities they are exposed to (Kalafatoglu & Mendoza, 2017; Shinnar et al., 2012). For example, women are not regarded as the household breadwinners, and are gender-stereotyped for certain jobs restricting their accessibility to work opportunities and leadership positions (Barka, 2005; Kalafatoglu & Mendoza, 2017).

Women's employment is important for their social and political advancement (Solati, 2017). Working women have better chances to take part in collective actions giving them more opportunities to participate in politics (Chafai, 2017; Solati, 2017). Women's political representation and electoral rights in the region have been constrained, and it has been considered as the lowest in the world (Sadiqi & Ennaji, 2011; Skalli, 2011; Tohidi, 2016). Women's presence in parliament is below 4% in many countries: Qatar (0%), Yemen (0.3%), Oman (1.2%), Kuwait (1.5%), Egypt (2.0%), and Lebanon

(3.1%) (UNDP, 2016). Some countries introduced quota systems to boost women's participation in politics, such as Algeria (31.6%), Tunisia (31.3%), Iraq (25.2%), also Jordan and Palestine, but no numbers were reported (Shalaby, 2016; UNDP, 2016; Welborne, 2016). However, this female inclusion in politics did not advance women's issues (Skalli, 2011). Schmidt et al. (2002; as cited in Hero & Wolbrecht, 2005, p. 4) discussed five cornerstones for political inclusion: 1) full access to participation, 2) representation in important decision-making process and institutions, 3) influence in power over government decisions, 4) adoption of public policies that address group concerns or interests, and 5) socioeconomic parity. With the quota system, some countries covered the first cornerstone; meanwhile, they did not address the four remaining cornerstones (Welborne, 2016). For example, after parliamentary elections of 2010 in Iraq, female politicians were not included in the negotiations to establish a compromise government (UNDP, 2016). Female politicians in the MENA region have been facing inequality and patronizing attitudes and have been excluded from the decision-making process (UNDP, 2016).

Women Activism in the MENA Region

For decades, movements for women's emancipation in the MENA region have been highly visible (Moghadam, 2003; Odine, 2013; Skalli, 2006). They have been pushing for reforms to ensure participation in politics and fight discriminatory laws (Gheytanchi & Moghadam, 2014; Skalli, 2006). However, for the last decade, women's movements witnessed a structural shift from traditionally organized (with a hierarchy and centralized decision-making) to looser networks (decentralized and relatively leader-less) (Gheytanchi & Moghadam, 2014; Lim, 2018; Sara, 2015). According to Gheytanchi and

Moghadam (2014) three factors affected this structural change: 1) the dissemination of new notions of democratic organizing and decision-making; 2) the urgency to circumvent authoritarian states, and 3) the spread of ICT tools around the world. The Internet facilitated activists' connectivity and mobilization to an unprecedented degree, which contributed to the feminization of the public sphere (Altuwayjiri, 2017; Moghadam & Sadiqi, 2006). This allowed women to expand their activism repertoire to include street protests, boycotts, petition drives, and other non-violent strategies (Gheytanchi & Moghadam, 2014). Women in Saudi Arabia, Morocco, and Iran pushed further women's issues to the center of events and demanded for women's participation in politics.

Saudi Arabia. Gender inequalities prevail in Saudi Arabia (Lim, 2018). Saudi women have been treated as legal minors under male guardianship (mahram) law, where they have to get permission from their legal guardians (husband, father, grandfather, son older than 18, or brother) to travel, study, apply for a job, or to file a court case (Al Lily, 2011; Thorsen & Sreedharan, 2019). Social media played a big role in challenging male guardianship (Noman et al., 2015). According to Thorsen and Sreedharan (2019), women's rights activist Aziza Al-Youcef started an online campaign tweeting against male guardianship. Other people joined her campaign using hashtags in Arabic and English such as #EndMaleGuardianship, #IamMyOwnGuardian, and #امري ولية أنا. The online campaign gained momentum and emboldened female activist Hala Al-Dorasi to petition to King Salman who later issued a royal decree reviewing male guardianship to grant women some freedom.

Twitter in Saudi Arabia is considered as a platform welcoming social and political debates (Almaghlooth, 2013; Altuwayjiri, 2017; Guta & Karolak, 2015; Luppicini &

Saleh, 2017; Noman et al., 2015). Saudi women sought Twitter to advocate for their right

to drive (Al Lily, 2011; Almaghlooth, 2013; Jarbou, 2018; Noman et al., 2015; Thorsen

& Sreedharan, 2019; Yuce et al., 2014). Yuce et al. (2014) examined the campaign

OCT26Driving advocating for women's right to drive in Saudi Arabia through the

dominant Twitter hashtags dedicated to the campaign: #oct26driving and #أكتوبر 26_ قيادة.

Their results revealed Twitter was an alternative platform for online collective actions,

and English hashtags helped draw transnational and interorganizational attention and

support. In September 2017, King Salman issued a decree lifting the ban on women's

right to drive (Lim, 2018).

  Similarly, Altuwayjiri (2017) investigated the influence of Twitter on the political

awareness of Saudi women. The researcher argued that before social media, women in

Saudi Arabia were unseen in the political circles which made the government ignore

them when passing laws. Their issues, such as the right to vote, were not heard and their

demands were not met. However, with the rise of social media, women were able to get

their voices heard. According to one of Altuwayjiri's participants:

  Twitter made the government aware of us. They thought: actually … we

  have a lot of intellectual Saudi women among us, they know how to speak

  and express themselves eloquently, they are smart and active!! It is like we

  said: we are here!! And they finally saw us (p. 160).

  Twitter allowed women activists to form groups and connect with people to

develop their ideas and express them. Noticeably, it granted them freedom of speech

(Almaghlooth, 2013). As an oppressed group in the community, women utilized the

anonymity Twitter allowed, and turned the virtual public sphere into a feminism platform

and a podium for democracy (Almaghlooth, 2013; Altuwayjiri, 2017; Guta & Karolak, 2015; Luppicini & Saleh, 2017; Thorsen & Sreedharan, 2019).

Iran. Over the years, Iranian women forged their way to achieve equality in education, science, literature, and arts; however, they still face struggles in areas such as politics, family, and personal status laws (Tohidi, 2016). Iranian women worked together to bring egalitarian change (Shirazi, 2012). Female cyberactivism through weblogs has increased over the years (Gheytanchi & Moghadam, 2014; Radsch & Khamis, 2013). According to Skalli (2006), the emergence of the blog community "Weblogestan" gave Iranian women a space to discuss gender politics and feminist agendas. E-magazines in Iran, such as IranDokht and Bad Jens, pushed for women' voices and boosted their visibility.

Iranian women relied on cyberactivism to address their concerns about discriminatory laws and to assert their place in the public discourse (Shirazi, 2012). Parvin Ardalan, a female activist, launched the online One Million Signature movement to advocate the change of discriminatory laws in Iran (Shirazi, 2012). Female bloggers analyzed the discriminatory aspects of the family laws. They exposed issues such as stoning, polygamy, temporary marriage, unilateral divorce, and the unfair inheritance laws (Gheytanchi & Moghadam, 2014).

Iranian women also took the lead during political upheavals. In June 2009, the Iranian presidential elections stirred controversy with protests demanding the removal of Mahmoud Ahmadinejad creating what is known as the Green Movement (Hashem & Postel, 2017). During this movement, Iranian women's rights activists shared videos clips on YouTube of the government brutality against activists, which unveiled the state

suppression of the protestors covered by mainstream media (Gheytanchi & Moghadam, 2014).

Morocco. Online platforms have offered Moroccan women the opportunity to fight violence against women (Aura, 2013; Chafai, 2017; Gheytanchi & Moghadam, 2014). In 2012, Amina Filali was raped at age 15 and forced to marry her rapist, she was physically abused and starved until she committed suicide a year later (Skalli, 2012). Women sought cyberspaces to mobilize and organize themselves to protest arbitrary laws in the Moroccan Family Law and Penal Code (more specifically Article 475) (Gheytanchi & Moghadam, 2014; Skalli, 2012). #RIPAmina gained momentum on Twitter, while an online petition to appeal the Penal Code gathered over 800,000 signatures (Sara, 2015). Women took up blogging in various languages to reach out to the international community and draw attention to the injustices inflicted on women (Skalli, 2012). Two years later, the Moroccan parliament voted in favor of amending Article 475 of the Penal Code (Sara, 2015).

Women-Shoufou is another Moroccan movement that utilized online platforms to combat sexual harassment (Chafai, 2017; Roberts & Marchais, 2018). Starting as a Facebook group in 2011, activists used social media to raise awareness, collect testimonies from harassment victims and witnesses and distribute them online (Aura, 2013; Skalli, 2014).

Women activism in the Arab Spring

On December 17, 2010, Mohammed Bouazizi, a Tunisian street vendor, self-immolated in the rural Tunisian town of Sidi Bouzid to protest oppression and poverty after he was told by the police, he did not have the right permit to sell his goods

(Boumlik, 2017). Bouazizi's act sparked a chain of demonstrations in the MENA region that ended up in what is now known as the Arab Spring (Lim, 2018; Mourad, 2014). The Arab Spring was welcomed as a transnational democratic movement where women took active roles and assumed prominent stances in the public sphere (Hosni, 2017; Khamis, 2011; Newsom & Lengel, 2012; Radsch, 2012). In the wake of the Arab Spring, thousands of women joined the movements in Tunisia, Egypt, Libya, Yemen and Bahrain, and extensively used ICT tools to mobilize themselves creating a new phase of feminist strategic action (Gheytanchi & Moghadam, 2014; Mourad, 2014; Salvatore, 2013; Shalaby, 2016). Women relied on technology to bypass censorship and state controlled mainstream media, to contribute to public discourse, to move women's issues from the private to the public, and to reach out to others nationally and internationally (Gheytanchi & Moghadam, 2014; Sara, 2015; Thorsen & Sreedharan, 2019). They took up social media demanding the removal of their long-ruling leaders (Radsch, 2012). Dalia Ziada, an Egyptian female blogger and activist, stated in her blog: "The most encouraging feature of the current upheaval is the massive participation of women; not only the young educated women who uses the internet but also the grassroots uneducated older women from rural cities" (Ziada, 2011).

Women's online and offline participation in the Egyptian revolution was highly notable (Gheytanchi & Moghadam, 2014; Radsch, 2012). In January 2011, women activists took their children with them to the protests and moved to online spaces, such as Facebook and YouTube, to demand a better future for their children using expressions like "activist mothering" (Gheytanchi & Moghadam, 2014; Radsch & Khamis, 2013).

According to Tufekci and Wilson (2012), social media empowered women during the Arab Spring to express themselves and take part in political activities when they were not able to attend meetings, or they were discouraged from speaking. Women played central roles in inspiring other people to oppose oppression in the region and call for freedom and dignity (Radsch & Khamis, 2013). Multiple female key figures utilizing cyberspaces and leading the revolutions in Tunisia, Egypt, Syria, and Yemen emerged during this era of political upheavals.

Women of the Jasmine Revolution: Tunisia. Lina Ben Mhenni, a Tunisian activist famous for her "A Tunisian Girl" blog, played a crucial role in the Tunisian Revolution, also known as The Jasmine Revolution (Boumlik, 2017; Pedersen & Salib, 2013). Lina was notable for being the only blogger writing about Mohammed Bouazizi's death on her blog, Twitter, and Facebook (Ayari, 2011; Radsch, 2012). Meanwhile professional journalists remained silent, Lina used her blog, writing in English, French and German to document the demonstrations and the violence inflicted on protestors by the government, and she became a trusted source of information locally and internationally (Ayari, 2011; Pedersen & Salib, 2013; Radsch & Khamis, 2013). She traveled around Tunisia posting pictures and reports about the manifestations (Radsch, 2012). Lina's bravery nominated her for a Nobel Prize in 2011; she is a symbol of women who stand against corruption (Pedersen & Salib, 2013).

Amina Yahyaoui is a Tunisian blogger, activist, and founder of Al Bawsala which has been situating citizens at the center of political actions to establish relationships with elected representatives and decision-makers, and to defend the notion of social progress and citizen empowerment (Boumlik & Schwartz, 2016). Al Bawsala is considered the

first parliamentary monitoring system in the Arab world (Boumlik, 2017). Amina has

been utilizing online platforms such as Twitter, Facebook, and YouTube to raise

awareness about civic and political engagement among adults in Tunisia. She also played

a central role in the peaceful transition of power, the revision of the constitution, and the

post revolution dialogue (Boumlik, 2017; Boumlik & Schwartz, 2016)

Marching Towards Tahrir Square: Egypt. In January 18, 2011, Asmaa

Mahfuz, a female Egyptian activist, posted a video of herself on YouTube to appeal to

her fellow citizens to join her in Tahrir Square to protest oppression and dictatorship

(Sara, 2015). Asmaa Mahfuz is considered a symbol of the Egyptian Revolution

(Goodman, 2011; Høigilt, 2011; Radsch, 2012; Sara, 2015).

Esraa abdel Fattah is a female Egyptian activist known as the "Facebook Girl"

and the leader of the famous youth opposition group called the April 6 Movement

(Radsch, 2012; Sholkamy, 2013). In 2008, Esraa created a Facebook group called "The 6

April Strike" and organized protests to support workers in Mahalla al-Kobra town

(Abdulla, 2011; Pedersen & Salib, 2013). These protests have been perceived as a pivotal

precedent for the Arab Spring (Pedersen & Salib, 2013). The April 6 Youth Movement

that emerged on Facebook evolved into a high-profile opposition force which was active

during the Egyptian Revolution (Abdulla, 2011). In 2011, Esraa was nominated for a

Nobel Prize for her online and offline activism during the Egyptian Revolution (Pedersen

& Salib, 2013).

Samira Ibrahim, an Egyptian activist, was the first person to publicly pursue a

legal fight against the military establishment after she was subjected to a virginity test,

along with 16 other female detainees, when she was detained for protesting in Tahrir

Square (Eltantawy, 2013; Flock, 2011; Hosni, 2017; Mourad, 2014). Ibrahim published a YouTube video detailing the sexual assault and physical abuse inflicted on her during her detention (Flock, 2011). A Facebook page was created, called "We are all Samira Ibrahim," to support her battle against sexual harassment (Mourad, 2014). A few months later, virginity tests for female detainees were banned (El Deeb, 2011; Flock, 2011).

Female activist Mona al-Tahawy took over the cyber world with her website during the revolution after being banned from an international Arab publication owned by Saudi Arabia (Hosni, 2017). Through Twitter, Al-Tahawy documented the sexual assault and brutal beating of female protestors, including her, in Tahrir Square (Hosni, 2017; Sara, 2015).

On a more controversial note, the Egyptian women's rights activists Aliaa Magda Elmahdy posted nude photo of herself on her blog protesting violence against women and demanding equality (Hosni, 2017; Lim, 2018; Sara, 2015). Her photo gathered 1.5 million hits within a week of its posting and received condemnations from conservatives and liberals alike (Mourad, 2014). After receiving multiple death threats and being kidnapped, Aliaa sought asylum in Sweden where she joined FEMEN (Asad, 2013). According to Mourad (2014), Alia' use of ICT tools launched a personalized revolution against oppression, corruption, and the repression of individual freedom. Mourad added, "Alia's unveiling expresses an alternative political vision which seeks self-fulfillment in the undressing rather than the veiling of the body" (p. 71).

Revolutionary Damascene Roses: Syria. Syrian women activists have been familiar with the use of ICT tools to their own advantage way before the Arab Spring. In 2009, they launched the online National Campaign against Honor Crimes where they

collected thousands of signatures for a petition that was sent to the government and the media (Gheytanchi & Moghadam, 2014).

Fadwa Suleiman, Syrian activist and famous actress, joined the protests against President Bashar al-Assad's regime (Brownlee, 2017; Langer, 2017). She is considered as one of the symbols of the Syrian Revolution (Roberts, 2017). Fadwa was at the frontlines of the protests, and she relied on technology to spread video messages online to mobilize and encourage people to protest on the streets (Brownlee, 2017). Fadwa Sulaiman passed away in 2017 in Paris, where she sought asylum, leaving behind her a legacy of women's leadership (Roberts, 2017).

Razan Ghazzawi, a Syrian blogger and media activist, converted her blog and social media into powerful weapons to raise awareness and uncover the crimes committed by Bashar's regime (Brownlee, 2017; York, 2011). Razan was one of the few anti-regime bloggers writing in English using her real name from inside Syria (Malsin, 2013; York, 2011). She risked her life to report the uprisings live from firing zones (Malsin, 2013). Razan's fearless activism made her the target of the regime, which shut down her blog and detained her on several occasions (Brownlee, 2017). However, her detention pushed her to be a prominent figure of the revolution, especially when Amnesty International called her a "prisoner of conscience" (Malsin, 2013).

The Iron Woman of Taghir Square: Yemen. Tawakkol Karman, a female Yamani activist and journalist, and the first Arab woman to win a Nobel Prize, is known as the face of the uprising in Yemen toppling President Ali Abdulah Saleh in 2011(New Arab, 2018; Radsch, 2012; Radsch & Khamis, 2013). Through online platforms, Tawakkol organized street demonstrations in solidarity with the Tunisian revolution

(Radsch, 2012). The protests she led witnessed the participation of an unprecedented number of women (Radsch & Khamis, 2013). Tawakkol took up Twitter to expose corruption in the Yemeni government and to organize street protests calling for political change (Radsch, 2012).

Women in the MENA region have always been part of social movements, political protests and revolutions (Gheytanchi & Moghadam, 2014; Radsch, 2012). MENA women have taken an essential role during political uprisings in the region; they created a virtual public sphere through social media and blogs and led people to protest oppression (Radsch & Khamis, 2013). Women in the region did not hesitate in voicing their concerns. Women took down social and traditional barriers and challenged cultural and religious norms and taboos to push women's right to the center of political and social change (Radsch, 2012). Just like their fellow female activists around the region, Algerian women have been in the front lines of struggles.

Women Activism in Algeria

Women in the Algerian Independence War

Throughout history, Algerian women have been in the front lines of struggles. Women seized every opportunity to fight for their country's freedom and their own rights (Hayef, 1995). In 1830, France invaded and colonized Algeria. Algerian women went through misery, repression and humiliation like their male counterparts. However, women were exposed to additional forms of violence, discrimination, illiteracy, and brutality (Amrane, 1996, Khanna, 2006). Women in Algeria suffered from systematic collective rape, kidnapping and murder by French colonizers (Lloyd, 2005; Khanna, 2006; MacMaster, 2007; Surkis, 2010). For the colonial authorities, women had no

political rights (Amrane, 1992). Algerian women were secluded and lived under a patriarchal system brought by the nature of a Mediterranean and Berber society (Amrane, 1996, Turshen, 2002). However, when the Front de Liberation National (FLN) (National Liberation Front) called for the war for independence (officially starting on November 1, 1954), Algerian women reported for duty (Heggoy, 1974; Lloyd, 2005; Lloyd, 2006; MacMaster, 2007; Turshen, 2002). Amrane (1992) identified women's participation in one of three categories: (1) Les maquisardes; represented 16% of the female militants who were active in the maquis (the bushes). These women were mostly nurses and were in charge of the health sector of the war. (2) Les fidayate; which comprised only 2% of the female militants, were directly involved with armed actions of the urban guerilla. (3) Les moussebilate; or the female civil resistance, represented the majority of the militants with 82%. The roles of these women were crucial to the war and they were mostly wives and mothers. They had multiple roles including raising funds, as well as serving in the roles of nurses, liaison agents, secretaries, propagandists, and information agents. However, their most important duty was to secure protected housing for the militants.

Women participation in the Algerian war for independence was a model for African women in liberation movements (Turshen, 2002). Unfortunately, their participation has been occulted from history (Amran, 1992). During the war, women were asked to keep their feminist agenda aside and devote themselves to the one and only cause: the independence of Algeria (Lloyd, 2006; MacMaster, 2007; Salhi, 2003). However, after the independence (July 5th, 1962) female militants disappeared from public life and were forced to return to private life according to social norms (Amran, 1992; Lloyd, 2005; Turshen, 2002). They were even socially rejected by their male

counterparts. Salhi (2003) reported that multiple female war veterans who married their comrades during the war were repudiated. None of the female militants were part of the FLN party (the ruling parting from 1962 till now) and were not invited to take part in the formation of the new country. According to Amran (1992), only a fraction of the female militants was invited to take part in political activities in a legal framework after the independence. Hence, the FLN party betrayed their female compatriots and robbed them of their political rights and activism (Heggoy, 1974; Messaoudi & Schemla, 1998; Salhi, 2003).

Contesting the Algerian Family Code

After the independence, the newly founded state struggled to support women's rights (Hayef, 1995; MacMaster, 2007). Nevertheless, women maintained their willingness to fight and were ready to resist anything that undermined their rights (Amrane, 1992). In 1976, the FLN government recognized the need for women emancipation in the new Constitution, but it stated that women were responsible to lead the battle for their freedom (Salhi, 2003). The 1980's in Algeria were marked by the rule of President Chadli Benjdid who was known for supporting the Islamists and collaborating with them. These compromises damaged women's autonomy (Turshen, 2002). In the early 1980's, Chadli issued a ministerial order preventing women from traveling without being accompanied by a male relative (Lloyd, 2006; Salhi, 2003). Algerian women protested the order and described it as an infringement of their civil rights. Women marched on the streets, and a group of them signed a petition and demanded to meet the minister of interior. Finally, Chadli's government withdrew from

their position and cancelled the order (Messaoudi & Schemla, 1998; Salhi, 2003;

Turshen, 2002).

Years later, women entered an endless battle with the discriminatory Family

Code. President Chadli proposed to revise the Code behind closed doors. Algerian

newspapers described this step as a means to appease the Islamists and a threat to

women's rights (Hayef, 1995; Salhi, 2002). Algerian feminist activists were infuriated

and engaged in a series of resistance activities. On October 28, 1981, women took to the

streets to express their anger toward the government. Two weeks later, women collected

more than 10,000 signatures of support from all over the country and gathered in front of

the National Assembly when it planned to hold its plenary session. Khalida Messaoudi

(who later became the Minister of Communication and Culture) recalled:

> Along with two friends I marched into the Assembly chambers. Rabah Bitat, the
>
> Assembly president, whose wife -a war veteran and lawyer- was with us, was
>
> obligated to adjourn the session. The assembly leaders skillfully manipulate the
>
> situation: we were given four days to "make propositions for amending the text,"
>
> which was still confidential. The movement became divided at that point: there
>
> was those who wanted to accept the deal, and those who rejected it. (Messaoudi &
>
> Schemla, 1998, p. 49).

A second attempt to appeal the new Family Code took place when women war

veterans joined young feminist activists on December 23, 1984, to protest in front of the

main post office. Female war leaders described the Code as a betrayal of what they

fought for (Salhi, 2003). In the end, Algerian women lost the battle against the Family

Code, which passed into law in June 1984 (Lloyd, 2005). However, this era was a

stepping-stone in Algerian feminism as it marked the creation of women organizations and associations to protect their rights (Ramoum, 1999). Those efforts were led by women only, as Khalida Messaoudi testified: "there were no men in our movement!... Men were painfully absent from our struggle" (Messaoudi & Schemla, 1998, p. 56).

Standing up against Terrorism in Algeria

During the end of the 1980's and most of the 1990's, Algeria entered a civil war with the Islamist fundamentalists, called the Black Decade, during which approximately 200,000 people were murdered (Khanna, 2008). This period witnessed a surge in public attacks and violence against women led by groups of men inspired by the radical Islamist group Front Islamique du Salut (FIS) (Islamic Salvation Front), which was legalized by President Chadli Benjdid (Lloyd, 2005; Khanna, 2008). FIS publicly stated that a woman's role was to reproduce Muslims, and if she rejected it, she was undermining God's law (Hessini, 1996; Lloyd, 2005; Lloyd, 2006; Turshen, 2002). Hence, women who challenged this notion became a target for violence (such as employed women, unveiled women, and women living alone). In 1994, FIS issued a Fatwa (an Islamic law) legalizing the killing of girls and women not wearing the veil (Khanna, 2008; Turshen, 2002). In June 1989, Saleha Dekkiche, a divorced woman living alone with her kids, was attacked by a group of men who stoned her and burned her house (Lloyd, 2006; Salhi, 2003). FIS followers threw acid at unveiled women in public spaces. A female nurse was set on fire by her fundamentalist brother because she was working with men in the hospital. The Groupe Islamique Armé (GIA) (Armed Islamic Forces), an Islamist insurgent group, slaughtered and raped countless of women. They slaughtered 11 women teachers in front of their students and shot dead Karima Belhaj, a secretary, near her

home. GIA also shot to death Katia Bengana, a high school student, for not wearing the veil. Over 2,000 women were reported to be raped (Lloyd, 2006). Additionally, GIA kidnapped young girls and women making them slaves in their forest camps (Lloyd, 2006; Turshen, 2002). These atrocities were only the tip of the iceberg of the violence inflicted on Algerian women during the Black Decade.

The escalating violence against Algerian women forced women's rights organizations and movements to shift their priorities from repealing of the Family Code to fighting violence against women. Women united their efforts to protest and document the violence in hopes of bringing international attention regarding the violent acts against women (Lloyd, 2006; Turshen, 2002). Women were pioneers in showing resistance to the Islamic terrorism (Moghadam, 2003). Algerian women protested on the streets and expressed their bitterness and anger (Turshen, 2002). Female political leaders and female writers spoke openly and fearlessly against the barbarity of the fundamentalists (Salhi, 2003). Rape and kidnapping survivors bravely testified to media and told their stories. Women around the country defied a GIA call for boycotting schools as mothers took their children to schools in solidarity with teachers (Turshen, 2002). In 1995, on Women International Day, a group of women, mostly members of the Algerian Union of Democratic Women, held a mock trial charging FIS leaders (Ali Belhaj, Abassi Madani, Anwar Haddam, Rebah Kebir) and the GIA for "crimes against humanity," along with President Chadli Benjdid for "killing democracy" (Khanna, 2008). The mock trial was promoted around the nation with rallies calling for Algerian women's "right to life" (Khanna, 2008).

The steadfast women who led opposition against the Islamist fundamentalists were rewarded with government positions; however, in small numbers. For example, Khalida Messaoudi, a pioneer of women activism and an anti-fundamentalist was appointed advisor to President Bouteflika after he assumed office in 1999. She later became one of five women cabinet ministers–the largest number in MENA (Moghadam, 2003). After Bouteflika granted amnesty to several thousand prisoners charged with terrorism, he had to adhere to feminists' demands that Islamist prisoners found guilty of crimes of rape could not benefit from the pardon (Moghadam, 2003). Women activism during the civil war gave them the strength to challenge the Family Code again until President Bouteflika agreed to amend it in 2001 (Moghadam, 2003).

The years that followed the Algerian civil war were characterized by relative stability. Meanwhile, other countries in the MENA went through the political uprisings of the Arab Spring starting 2011 (Bruns et al., 2013; Hermida et al., 2014; Khamis, & Vaughn, 2013; Kharroub, & Bas, 2016; Soengas-Pérez, 2013). Bouteflika's nomination for a 5th term sparked a series of protests across the country in the spring of 2019. Citizens were calling for change due to a high rate of unemployment, government corruption, and the degradation of quality of life. Algerian women were at the center of the manifestations side by side with men, and once again, women reported for duty when resistance called.

CHAPTER III

Methodology: Adopting the Qualitative E-Research Framework

Salmons (2016), introduced the Qualitative E-Research Framework as a holistic approach to designing and conducting online qualitative research, or E-Research. Salmons (2016) defined qualitative e-research as: "An umbrella term used to describe methodological traditions for using information and communication technologies to study perceptions, experiences or behaviors through their verbal or visual expressions, actions or writings" (p. 6).

The Framework provides researchers with tools for thinking through and organizing aspects of online qualitative research design. It consists of nine interrelated steps, with each a set of questions and models:

- Step 1: Choosing a qualitative e-research approach for the study

- Step 2: Aligning purpose and design in qualitative e-research

- Step 3: Taking a position as a researcher undertaking qualitative e-research

- Step 4: Selecting extant, elicited or enacted methods for collecting data online

- Step 5: Selecting ICT and milieu for qualitative e-research

- Step 6: Handling sampling and recruiting in qualitative e-research

- Step 7: Addressing ethical issues in qualitative e-research

- Step 8: Collecting the data online in qualitative e-research

- Step 9: Analyzing the data and reporting on qualitative e-research

Step 1: Choosing a Qualitative E-Research Approach for the Study

In this the first phase of the framework, the researcher provides the rationale for why collecting data study online. Additionally, the researcher needs identify whether ICTs serve as the communication medium, where ICTs are chosen as medium of communication; the research setting, where ICTs serve as the electronic research milieu; and/or the phenomenon the inquiry is designed to examine, where ICTs are part of the investigated phenomena (Salmons, 2016).

This research study used social media platforms, specifically Twitter, as a setting, and the phenomenon the inquiry is designed to examine. Social media use has increased in recent years facilitating the access and distribution of information on the Web (Ahmed et al., 2018; Morgan et al., 2010). Boyd et al. (2007) defined social media platforms as:

Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site (p. 211).

Researchers and scholars have been attracted to the user-generated content in massive data sets, or big data, to understand the roles that social media platforms play in contemporary society (Beninger et al., 2014; Halford, 2018; Skalski et al, 2017; Snelson, 2016). According to Boyd & Crawford (2012), big data is a cultural, technological and scholarly phenomenon that relies on: (1) the intersection of technology: exploiting computer power and algorithms to search, collect and cross-reference large data sets; (2) analysis: using large data sets to find patterns; (3) methodology: large data sets could

offer knowledge that can produce insights that was hard to get in the past. Social media

platforms can create settings for researchers to investigate a phenomenon as they provide

an insight into people's online and offline world and their life experiences in a naturally

occurring setting (Ahmed et al., 2018; Gerber et al., 2017; McKenna et al., 2017; Nurdin,

2017). Researchers can expand their setting and generate data in an environment where

they are not constrained by time and space (Gerber et al., 2017; Nurdin, 2017). They can

maintain accessibility to previous and ongoing data (Nurdin, 2017). Researchers have

been capable of collecting large quantities of information from social media platforms

through data mining or scraping (Beninger et al., 2014).

Step 2: Aligning Purpose and Design in Qualitative E-Research

This phase of the framework discusses the research questions, theories,

methodologies, and methods appropriate for the study, and how they all align (Salmons,

2016).

Research Questions

The following research questions guided this study:

RQ1: What is the impact of Twitter on women's activism during the Hirak?

RQ2: How does Twitter provide opportunities for women to articulate their identities

during the Hirak?

RQ3: How does Twitter allow Algerian women to establish new roles of political

participation during the Hirak?

Theoretical Framework

Cyberfeminism fits this study because it frames women's activism through the

use of technology (Gajjala, 1999; Hawthorne & Klein, 1999; Puente, 2008). It perceives

the Internet as a place where women can be free from the social and physical restraints of the material world, and it offers new ways for more egalitarian gender relationships (Cunningham & Crandall, 2014). CyberFeminism offers a comprehensive approach to women's activism in online spaces through connectivity, critique, and creativity (Hawthorne & Klein, 1999).

Methodology: Content Analysis

Content analysis thoroughly examines recorded human communications using qualitative or quantitative techniques, and sometimes mixed, to make valid interpretations of the messages and the context around them (Hoffman et al., 2011; White & Marsh, 2006). Researchers traced content analysis back 4000 years ago with Aristotle's rhetorical analysis of arguments (Hoffman et al., 2011). However, it was not recognized until the early 20th century when it was picked up by journalism schools to study newspapers and then mass communication after World War II (Hoffman et al., 2011; Neuendorf, 2017; White & Marsh, 2006). With the development of technology, content analysis reached out to other fields such as intelligence, political science, business, psychology, and sociology (Hoffman et al., 2011; Neuendorf, 2017; White & Marsh, 2006).

Content Analysis in Social Media Research. Snelson (2016) reviewed the literature to examine trends in qualitative and mixed methods in social media research, and his findings revealed that content analysis is the most used methodology when working with data source mined from Twitter and Facebook posts, YouTube videos, and other social media content. Morgan et al. (2010) employed a content analysis approach to analyze images and videos extracted from YouTube and Myspace to examine alcohol and

marijuana-related behaviors. Utilizing #selbstmord, Arendt (2019) conducted a content analysis to get a better understanding of suicide in Germany. Through a hybrid content analysis, Paschen et al. (2020) explored motivations and human values of everyday consumers who participated in the annual day of consumption restraint known as Buy Nothing Day through Twitter. Similarly, Nejad et al. (2018) utilized content analysis to examine how Twitter users perceived the hijab (the head veil).

Methods: Qualitative Content Analysis

Qualitative content analysis (QCA) as research method focuses on the systematic, objective, and reliable procedure of describing and quantifying phenomena (Elo et al., 2014; Guthrie et al., 2004; Neuendorf, 2011). It relies on the process of codifying data into categories to be able to develop patterns in the presentation and reporting of findings (Guthrie et al., 2004). By creating categories, concepts, models, conceptual systems, or conceptual maps, data could be reduced to concepts or themes that describe the studied phenomena (Elo et al., 2014). QCA can be inductive or deductive (Elo et al., 2014; Elo & Kyngäs, 2008). This research study utilized an inductive approach. The inductive approach, also called conventional, necessitates the researcher to avoid relying on preconceived categories and allow categories and themes to emerge from the data (Dey, 2003; Hsieh & Shannon, 2005; Kondracki et al., 2002). An inductive CA requires three phases: preparation, organization, and reporting of findings (Assarroudi et al., 2018; Elo et al., 2014; Elo & Kyngäs, 2008; Graneheim & Lundman, 2004).

The Preparation Phase. It includes the collection of proper data for the analysis, making sense of the data, and selecting the analysis unit (Elo et al., 2014). Selecting the analysis unit can be a word, a sentence, a paragraph, or a theme (Elo & Kyngäs, 2008;

Guthrie et al., 2004). Graneheim and Lundman (2004) suggested that the most suitable

analysis unit is a whole data set large enough for analysis taking into consideration the

context. At this phase, the researcher decides whether to analyze only manifest content

(visible at the surface level) or to include latent content as well (deeper meaning implied

such as; silence, laughter, sighs, body language, etc.) (Elo & Kyngäs, 2008; Graneheim &

Lundman, 2004; Kondracki et al., 2002). Materials are examined and read multiple times

to allow the researcher to immerse herself in the data and become familiar with them

(Hsieh & Shannon, 2005). According to Dey (2003), reading qualitative data requires an

interactive approach. One way to address data is to ask the questions: Who is telling?

Where is this happening? When did it happen? What is happening? Why? (Dey, 2003;

Elo & Kyngäs, 2008). For the visual data, the researchers used Clarke's (2005) Mapping

Visual Discourses asking the following questions:

- How does the variation in color direct your attention within the image?

- What work is the image doing in the world?

Organization. This phase comprises open coding, creating categories, and

abstraction (Elo et al., 2014; Elo & Kyngäs, 2008). Open coding includes highlighting the

significant statement within the data that captures key thoughts or concepts (Hsieh &

Shannon, 2005). Next, the researcher takes notes and writes headings as necessary in the

margins about her first impression, thoughts, and initial analysis to describe all content

aspects (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). Clusters of meaning are

highlighted within the significant statements and are collected along with notes and

headings into a coding sheet, where categories are freely generated (Elo & Kyngäs, 2008;

Hsieh & Shannon, 2005). Categories represent patterns or themes that are directly expressed in the data or acquired through the analysis (Hsieh & Shannon, 2005).

Creating categories is the next step to take. The lists of categories are quantified and grouped within higher order headings, or "aggregated" (Elo & Kyngäs, 2008; Graneheim & Lundman, 2004). The researcher groups data to condense them to a number of sets of categories, while preserving the core, where each category expresses a criterion of similarity or a relationship to some particular aspect(s) (Dey, 2003; Elo & Kyngäs, 2008; Graneheim & Lundman, 2004). Generating categories allows the researcher to describe the phenomenon, to improve her understanding, and to develop knowledge (Elo & Kyngäs, 2008). Graneheim and Lundman (2004) emphasized that no data should be eliminated because it does not fit into a category, and no data should match two categories.

Abstraction refers to developing a general description of the research topic through generating categories (Elo & Kyngäs, 2008). Each category is named using content-characteristic words (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). The researcher can rely on the relationship between the subcategories to organize them into small categories, which then would be grouped as main categories (Elo & Kyngäs, 2008; Hsieh & Shannon, 2005). A tree diagram could be used to better organize all these categories into a hierarchical structure, (Dey, 2003; Elo & Kyngäs, 2008; Hsieh & Shannon, 2005).

Reporting the Findings. When the researcher prepares to report her findings, it is important to provide a detailed description of the analysis process, and appendices and tables can be used for this purpose (Elo & Kyngäs, 2008). The researcher identifies each

code and category from the data (Hsieh & Shannon, 2005). The theoretical framework, the literature review, and their relation to the findings are addressed in the discussion section of the study (Hsieh & Shannon, 2005). The discussion would also consist of a summary of how the findings add to the body of knowledge around the studied topic, and suggestions for teaching practices and future research (Hsieh & Shannon, 2005).

Content analysis is a good methodology to understand the experiences of women as agents of change through digital literacy during times of political uprisings. Content analysis utilizes communication in all its forms to get a better understanding of social interaction (Hoffman et al., 2011; White & Marsh, 2006). CA provides feminist and gender studies researchers the tools to explore gender's issues (Fields et al., 2010; Neuendorf, 2011). This thorough and flexible methodology provides a valuable insight into social and cultural constructs (White & Marsh, 2006).

Step 3: Taking a Position as a Researcher Undertaking Qualitative E-Research

In this phase of the framework, the researcher states her position in the study as either an insider (emic), or an outsider (etic), and the implications of this choice. An emic position draws on the researcher's knowledge on the issue and problem to identify the research questions, and she immerses herself in the study and contributes data. An etic position identifies the research questions from the literature review, and the researcher seeks to remove self and biases from data and its collection (Salmons, 2016).

For this research study, the researcher identified as an outsider, where she took a passive observer role. This implies that she was a miner using online existing materials developed without the researcher's influence, and she did not seek to gain access to a

certain social media group to have a closer access to confidential, private, or sensitive data (McKenna et al., 2017; Salmons, 2016).

The researcher also states her position as a miner, gardener, or traveler (Salmons, 2016). The miner is the researcher who delves into facts and feelings of the participants; meanwhile, the traveler explores and experience the research phenomena with the participant. Finally, the gardener establishes nurturing reports with participants online (Salmons, 2016). In this study, the researcher identifies as a miner.

Step 4: Selecting Extant, Elicited or Enacted Methods for Collecting Data Online

The researcher in this phase discusses the data collection approach. Salmons (2016) proposed three approaches: (a) Extant, where the researcher relies on already exisiting data without her influence. Data can be collected from posts, discussions, social media platforms, blogs, drawing, images and photographs, recorded audio or audio-visual media; archives; documents and reports datasets and databases; etc. In this case the researcher has no direct contact with participants. (b) Elicited, encompasses data collected from participants in response to the researcher's questions or prompts through interviews and focus groups. (c) Enacted, refers to studies using data generated with the participants through vignette, scenario or problem-centered interviews; stimulations, role-plays or dramatic activities; art-based research; and games.

This research study used an extant approach for the data collection. It only relied on user-generated data created without the researcher's influence. Extant data is organized in three categories: (a) historical materials, which include scanned materials form the pre-internet period and posted online; (b) contemporary materials, which encompass those developed for electronic access; and (c) Emergent materials, which

emerges now in current discussions, blogs, or social media platforms (Salmons, 2016). This research study relied on emergent materials, using Twitter as its setting to mine data using the hashtag (written in Arabic): خليها_تهدر# (#let_her_speak).

Step 5: Selecting ICT and Milieu for Qualitative E-Research

This section addresses the features of the chosen ICT (Salmons, 2016). For the purpose of this study, Twitter was be chosen as the platform for data collection. Twitter is a microblogging platform created in 2006 by Jack Dorsey, Noah Glass, Biz Stone, and Evan Williams. Twitter users can send and receive information updates of up to 280 characters (Ahmed et al., 2018; Purohit et al., 2013). Users can subscribe to others, which is known as "following," to get updates and microblogs from them (Wassim Ahmed et al., 2018). Microblogs can be delivered and read through the web, instant messaging clients or text messages via mobile phone (Crawford, 2009). Purohit et al., (2013) and Ahmed et al. (2018) described some of Twitter features as follows:

Tweet. A post of no more than 280 characters, which includes users' activities, updates, and information.

Hashtags. They are denoted by a word proceeding "#" symbol (e.g. #MeToo). They are a platform convention for user-defined subjects, which make them a key tool to group discussions by topic.

Reply. To reply is to communicate with the tweet author. It automatically embeds the originator's username.

Retweet. It is when users forward another user' tweet to their followers. Twitter added a new feature where users can retweet with a comment.

Mention. Users can acknowledge another user using the symbol "@."

Trending. It refers to when a topic, defined by a key word or a hashtag, is popular during a specific timeline. Twitter introduces a list of trends based on the frequency of a particular hashtag.

Twitter Users in the MENA Region

According to the Arab Social Media report (Salem, 2017), only 16% of the participants said that they would report false information on Twitter, compared to 40.4% on Facebook. Only 11.9% said they closed their Twitter accounts in the past year compared to 22.4% on Facebook. For Twitter activity around the region, Algeria was third for most users with 2.3 million users a day. The number of active twitter users in Algeria increased by 773,500 between March 2014 and March 2016, ranking the first in the Arab World. As for the gender breakdown of active users, Algeria came second after Bahrain with 57% male and 45% female. For language use, the report showed that Algerians use: Arabic (over 70%), French (over 60%), and English (less than 10%).

Twitter in Research

Twitter is the most researched platform in academia (Ahmed, 2017; Ahmed et al., 2018; Beninger et al., 2014). Because it easy to extract data from Twitter, many research studies have used it to explore a broad-spectrum of patterns such as political uprisings (Bruns et al., 2013), riots (Procter et al., 2013), academia (Eaton & Pasquini, 2020; Pasquini & Eaton, 2019), education (Dhir et al., 2013), natural disasters (Lachlan et al., 2014), public opinion (Meneses et al., 2018), and crisis events (Simon et al., 2014). The strong Twitter hashtag culture facilitates data gathering, sorting, and expanding, which makes it easier to mine data on special events centered around a hashtag (Ahmed et al.,

2018). Twitter's popularity could also be attributed to the fact that it attracts attention from the mainstream media (Ahmed et al., 2018).

Step 6: Handling Sampling and Recruiting in Qualitative E-Research

This step addresses sampling and recruitment in qualitative e-research. It addresses whether the study engages human participants on not, and what selection criteria will be used (Salmons, 2016). According to Li and Walejko (2008), sampling frames in studies exploring blogs are usually lists of bloggers or blogs. Li and Walejko (2008) identified two types of sampling: Probability and non-probability sampling. They argued that non-probability sampling is the easiest way to sample a large number of blogs. Non-probability sampling techniques encompass convenience sampling, quota sampling, and snowball sampling. This study employed convenience sampling because it facilitates the researcher's accessibility to sampling units and allows her to focus on identified themes or characteristics of the study (Li & Walejko, 2008; Salmons, 2016).

This study used extant data, which means it did not engage human participants. The selection criteria for the sampling was set to be use-generated content mined through the hashtag خليها_تهدر#. Tweets, comments, videos, photographs, and pictures were collected. The timeline for data collection was set between March 29, 2019 and April 30, 2019.

Step 7: Addressing Ethical Issues in Qualitative E-Research

This step consists of the ethical considerations when conducting e-research (Salmons, 2016). It addresses how researcher plans to protect human subjects: getting informed consent, understanding the private and public feature online platforms, how to

not harm participants, anonymity in online spaces, and the confidentiality of users and data (Gerber et al., 2017).

Informed Consent

It refers to the process of informing the participants about the study in order for them to decide whether they want to participate or not (Gerber et al., 2017; McKenna et al., 2017). When conducting research in online spaces, and more specifically when scraping data from social media platforms, it's unfeasible to get consent from everyone due to the large volume of data (Ahmed et al., 2018; Beninger et al., 2014; Boyd & Crawford, 2012; Halford, 2018; McKenna et al., 2017). Data scraped from social media platforms is considered public domain, and researchers have the right to use and distribute materials (Ahmed & Lugovic, 2019; Ahmed et al., 2018; Gerber et al., 2017; Halford, 2018; McKenna et al., 2017; Thelwall & Stuart, 2006; Zwitter, 2014). It is also argued that hashtag tweets are intended to be visible to a larger audience; hence, informed consent is not necessary (Ahmed et al., 2018). However, researchers should maintain principles of care (Ackland, 2013; Boyd & Crawford, 2012; Gerber et al., 2017; Williams et al., 2018).

For the purpose of this research study, the researcher took an outside observer role. It means that she was a passive observer who was only be involved in scraping user-generated publicly available data from social media platforms via a software, in contrast to an involved researcher who gains access to a certain social media group to have a closer access to confidential, private, or sensitive data (McKenna et al., 2017). This means that consent was not needed. According to Williams et al. (2018), when consent is hard to get from large datasets scraped from social media platforms, researchers should

only report depersonalized data, and use filters and controls to remove personal identifiers. The researcher of this study adhered to these recommendations.

Public and Private

Many researchers argued that research in online spaces is rich and dynamic, and that the notion of public and private cannot be regulated by a one-size-fits-all approach (Gerber et al., 2017). They believe that researchers must understand and comply with the terms of the studies space (Gerber et al., 2017; Skalski et al., 2017). According to Ahmed et al. (2018), Facebook is considered a more private platform than Twitter. Data mined from Facebook is only available at an aggregate level; however, most content shared on Twitter is publicly accessible through Twitter API or other programs (Ahmed et al., 2018; Beninger et al., 2014). Additionally, Twitter and Facebook users perceived Twitters posts inherently more public than Facebook posts (Beninger et al., 2014). Skalski et al. (2017) perceived Twitter as a platform used to spread information to a large a group as possible, making it key mass communication tool. They added that it is rare to find a tweeter feed that is not public.

Do No Harm

Like any other traditional research, social media research abides by the do no harm principle (Ahmed et al., 2018; Beninger et al., 2014; Gerber et al., 2017). Social media users should not be put at risk within the research context and they should not be affected by any physical, emotional, or psychological harm (Beninger et al., 2014; Metcalf & Crawford, 2016; Williams et al., 2018). For the purpose of this study, tweets Identification Numbers (IDs) were not released, and the data analysis was conducted without drawing attention to the users (Ahmed et al., 2018; McKee, 2013). Additionally,

the researcher acted as an outside observer, and she only mined publicly accessible data (McKenna et al., 2017)

Anonymity

Anonymity in online spaces is crucial to make sure that the participants' identity is properly protected (Gerber et al., 2017; Williams et al., 2018). To protect participants identity Gerber et al. (2017) and Bruckman (2002) recommends four levels of "concealment" or "disguise:" (a) no concealment or disguise, (b) minimum concealment or light disguise, (c) medium concealment or moderate disguise, and (d) maximum concealment or heavy disguise. Due to the sensitivity of the data, the researcher opted for the maximum concealment level: all the identifying information were changed, and it was unlikely to recognize the participants (Bruckman, 2002; Gerber et al., 2017). Direct quotes that might be linked to the participants through a search mechanism were carefully reworded while keeping the meaning and sentiment of the original post (Ahmed et al., 2018; Bruckman, 2002; Gerber et al., 2017; Williams et al., 2018). If a tweet had been deleted during the time of writing, the researcher considered the content removed from the public domain, and it was be published (Williams et al., 2018). Because of infeasibility of getting consent, analysis was only be conducted upon depersonalized data (Williams et al., 2018).

Confidentiality

Concerning users and data confidentiality, all data were kept on a secure password-protected laptop, and a password-protected university computer. The researcher had control of the data mined from Twitter, and she acted as the custodian of the data. Data analysis was conducted by the researcher and took place at the researcher's place of

study and home. Data was not be analyzed in a public place. The researcher might had to share certain data with her dissertation chair.

Step 8: Collecting the Data Online in Qualitative E-Research

This step focuses on the researcher's plan to collect data online (Salmons, 2016). Multiple software applications are available to help researchers mine data from Twitter. There are applications where researchers have to pay such as NodeXL, and Discover Text, and some applications are available free such as Mozedeh, Chorus, and TAGs (Ahmed & Lugovic, 2019; Ahmed et al., 2018). Most Twitter researches have utilized Search Application Programming Interface (API) for free, or Firehose API at a cost (Ahmed et al., 2018). API refers to a set of tools available to developers to access structured data (Boyd & Crawford, 2012). The difference between the free Search API and Firehose API is that the free version will not mine the complete records of tweets; meanwhile, the Firehose API will get the full record of tweets (Ahmed et al., 2018).

According to Felt (2016), individuals and small research groups who do not have research funds mostly rely on tools that use Twitter's API capacities. Due the currently expensive and limited access to the full data stream, this research study utilized Scraphero's API to collect data.

Step 9: Analyzing the Data and reporting on Qualitative E-Research

This step addresses the researcher's plan for preparing, organizing, and coding all types of data (Salmons, 2016). This research study followed the three phases of qualitative content analysis: preparation, organization, and reporting of findings (Assarroudi et al., 2018; Elo et al., 2014; Elo & Kyngäs, 2008; Graneheim & Lundman, 2004).

Due to the large volume of data, McKenna et al. (2017) recommended that researchers use a filtering or data mining techniques to reduce the large amount of text. Researchers argue whether to code the entire data set or only the most important data (Loflan et al., 2006; McKeena et al., 2017; Seidman, 2006). McKeena et al. (2017) advise qualitative researchers to code only important data because it is impossible to analyze it all. They suggest focusing on only relevant data, and data particularly useful for answering the research questions.

McKeena et al. (2017) also recommend the use of a qualitative data analysis software to assist in the management and analysis of the vast amount of data. They suggested software such as NVivo and Leximancer. Sotiriadou et al. (2014) used NVivo and Leximancer to analyze the same set of data to examine the differences in findings depending on the type of software used. Their findings revealed NVivo allowed for an elaborate storytelling, which is useful in drawing meaningful results and implications. This research study utilized NVivo to help with the management and analysis of the data.

Establishing Trustworthiness

Credibility

Credibility, or internal validity, implies how strongly data and the analysis process address the intended focus (Gerber et al., 2017; Graneheim & Lundman, 2004). According to Merriam (2014), credibility addresses the question of how the study findings reflect reality. Lincoln and Guba (1985) suggested several procedures for credibility such as triangulation, peer debriefing, and prolonged engagement.

Triangulation. According to Elo et al. (2014): "The trustworthiness of content analysis results depends on the availability of rich, appropriate, and well-saturated data."

McKenna et al. (2017) recommended the triangulation of different types of data to increase confidence and understanding of the findings. This study included a variety of Twitter data such as posts, pictures, videos, and comments.

Peer debriefing. Peer debriefing or peer examination requires the researcher to discuss the study process and findings with an impartial experienced qualitative researcher (Gerber et al., 2017; Merriam, 2014). Lincoln and Guba (1985) perceive peer examination as an approach to keep the researcher honest because it encourages her to deeply reflect throughout the analysis process. Peer debriefing makes the researcher consider alternative experiences and interpretations (Gerber et al., 2017). The debriefing process gives the researcher the chance to set aside any emotions and feeling that might be hindering her good judgement or the emergent of sensible next steps (Lincoln & Guba, 1985)

Prolonged engagement. According to Lincoln and Guba (1985), it refers to investing sufficient time to understand the culture, to test for misinformation, and to build trust. They argue that it is impossible to understand a phenomenon without referring to the context in which it is embedded.

Transferability

Transferability, or external validity and generalizability, addresses the extent to which research findings can be applied to other situations and settings (Gerber et al., 2017; Merriam, 2014). Lincoln and Guba (1985) suggested the strategy of thick description, also called mélange of descriptors, to enable transferability. They defined it as "everything that a reader may need to know in order to understand the findings" (p. 125).

Dependability

Credibility and dependability and are intertwined (Gerber et al., 2017; Graneheim & Lundman, 2004; Merriam, 2014). According to Lincoln and Guba (1985); "a demonstration of the former is sufficient to establish the latter" (p. 316). They argued that it is possible to rely on techniques used for credibility. They also recommended the use of an audit trail where the researcher describes in detail her journey with the method, data collection and analysis, and reporting findings. In QCA, it is necessary to make connections between the results and the data (Elo & Kyngäs, 2008). This requires the researcher to provide a detailed description of the analysis process when reporting findings; this can be strengthened by including appendices and tables (Elo & Kyngäs, 2008).

Confirmability

Confirmability addresses the degree to which the researcher acknowledges her predispositions (Gerber et al., 2017). Lincoln and Guba (1985) recommended two techniques to establish confirmability: triangulation and keeping a reflexive journal. Reflexive journals are highly used within feminist studies (Harrison et al., 2001; Ortlipp, 2008). Harrison et al. (2001) argued that feminists seek research that consist of their description of themselves, and they are attracted to topics that are important to women and other marginalized groups. It is crucial to reflect on how "the researchers' own experiences, values, and positions of privilege in various hierarchies have influenced their research interests, the ways they choose to do their research, and the ways they choose to represent their research findings" (p. 325).

Summary

This chapter adopted the Qualitative E-Research Framework. Discussion is provided regarding the nine steps of the framework: (1) choosing a qualitative e-research approach for the study, (2) aligning purpose and design in qualitative e-research, (3) taking a position as a researcher undertaking qualitative e-research, (4) selecting extant, elicited or enacted methods for collecting data online, (5) selecting ICT and milieu for qualitative e-research, (6) handling sampling and recruiting in qualitative e-research, (7) addressing ethical issues in qualitative e-research, (8) collecting the data online in qualitative e-research, and (9) analyzing the data and reporting on qualitative e-research. It also addressed how establish trustworthiness when conducting research in online spaces.

CHAPTER IV

Data Analysis

Introduction

The purpose of this study is to examine women's digital literacy practices in the

2019 Algerian Hirak through Twitter. This chapter presented the data analysis process

and results to answer the following research questions: (1) What is the impact of Twitter

on women's activism during the Hirak? (2) How does Twitter provide opportunities for

women to articulate their identities during the Hirak? (3) How does Twitter allow

Algerian women to establish new roles of political participation during the Hirak?

The procedures of data collection included three steps. The first step was the

preparation phase which involved collecting and cleaning data from Twitter. The second

step was the organization phase which included the procedures of data analysis and the

five cycles of coding. The last step reported the study findings and it encompassed the

discussion of the core themes.

The Preparation Phase: Collecting Data

Data were collected from Twitter using #خليها_تهدر (#let_her_speak). This hashtag

was used as a reference to the attack on the feminist square during the protests. In an

attempt to mobilize themselves during the Hirak, the Algerian Women for Change

Toward Equality set up a feminist square in front of the Central Faculty in Algiers

(Ouitis, 2019; Wartelle, 2019). Two weeks later, the square was attacked by a group of

men who destroyed their signs and told them that it was not the moment to call for

women's rights (Benfodil, 2019; Ouitis, 2019; Wartelle, 2019). However, women carried

out their feminism, and used social media to document their aggression, to state their

commitment to feminism, and to mobilize women (Benfodil, 2019). A widely spread video on social media showed one of the attacked feminists, Sonia Guessimi, being interviewed by a female journalist and surrounded by a big crowd. The video showed how every time Sonia tried to express herself, she was disrupted by the crowd. The journalist then started shouting in Darja (Algerian dialect): "Let her speak! Let her speak!" Thus, people used #let_her_speak to address women's rights during the Hirak.

To select the proper software to mine my data, I met online with an expert in researching data extracted from Twitter. After explaining to her my research, we discussed and explored multiple options. We also took into consideration my limited skills to manipulate APIs, and she suggested Scraphero (L. Pasquini, personal communication, June 3, 2020). Scraphero is a web mining service provider located in the United States. They offer web crawling and data extraction services. Mined data can easily be downloaded as a CSV, JSON, or XML file and can be accessed in real time through an API (Scraphero, 2020).

In Scraphero, I started for free and named my file: Let her speak. To get the Twitter link, I opened a Twitter account, I went to advanced Twitter and searched for tweets using: #خليها_تهدر, and timeline: March 29 to April 30, and I clicked on latest. Then I copied the URL and pasted it into Scraphero, and I started gathering data. It's important to note that I was notified that Scraphero scrapes without logging in, so the actual number of tweets might differ. Data were gathered in two minutes and four seconds.

The data mining rendered 157 posts, and extracted the following: Handle, Name, Content, Replies, Date, Retweets, Favorites, Unix_timestamp, URL, URL Search, and Hashtags. Each content section included a link to the post to view the pictures, videos or

any links associated with the tweet. I downloaded data in an excel file. Of note, Scraphero did not extract replies.

Collecting Replies

Although Scraphero did not extract replies, after going through the tweets multiple times, I realized the importance of the replies as part of the big discussion. To collect the replies, I emailed an assistant professor in the Department of Computer Science at Sam Houston State University, and I kindly asked him to assist me in this task. He explained to me: "to play with tools and APIs, you need to know a couple of fundamental things, which include scriptings (with Python or R), command-line processing, etc. It is going to be rather simple for those who know the fundamentals; however, without knowing these fundamental skills, collecting raw data itself is going to be challenging" (H. Cho, personal communication, June 6, 2020). He suggested some software, but I could not figure out how to use them, and I decided to collect the replies manually.

I collected the replies manually from 104 tweets, I put each tweet and its replies in a separate word document, and I numbered them to know where they belong. Collecting the replies manually allowed me to immerse myself in the data and track the conversations (who is talking to whom). It offered me the opportunity to see first-hand the conversations around women's rights in Algeria and grasp the major issues which facilitated the coding process. It also gave me a better visual of the flow of the discussion and Twitter. I would like to mention that some replies had notes such as:

- This account owner limits who can view their Tweets. Learn more
- This Tweet is from an account that no longer exists. Learn more (removed)

- This Tweet is from a suspended account. Learn more

- This Tweet is unavailable

Cleaning Data

Round One. I went through each tweet and marked the tweets that did not have

خليها_تهدر # and the ones that had the hashtag but were out of context and irrelevant. I also

took notes on the side and marked some tweets as maybe.

Round Two. I read the tweets again and marked the ones that were relevant.

Additionally, I revisited the previously marked 'maybe' tweets and sorted them

accordingly (relevant or irrelevant).

Round Three. I filtered my data to only see relevant tweets. I read the tweets

again to make sure that all the tweets used خليها_تهدر # and addressed the topic. Data were

reduced to 123 tweets.

Round Four. I went through the 123 tweets and removed duplicate tweets and

retweeted tweets. The number was reduced to 104 tweets. Data were written in Standard

Arabic, Darija (Algerian dialect), French, and English.

The Organization Phase: Procedures for Analysis Data

Bias Statement

It is important to mention that I am an Algerian woman. I was born and raised in

Algeria. As an Algerian woman, I did suffer from harassment, oppression, and gender

discrimination in the country. I also identify as a feminist who was raised by feminists.

Thus, I would like to state that reading the tweets and replies sparked a spectrum of

feelings such as anger, anxiety, pride, etc. To separate myself from the research, I started

an emotional journal where I put down all my feelings and emotions. I also made sure to

take the time to reflect on them. Then, I read all the tweets and replies multiple times until they had no effect on me.

Identifying Gender

To determine the users' gender, Ugheoke (2014) argued that gender identification in Twitter includes: (1) the user profile, (2) user tweeting behavior, (3) the linguistic style of the content, (4) and the user's social network. The user profile refers to the information collected by Twitter such as profile avatar, username, and user bio. User tweeting behavior addresses: "the number of tweets posted per user; the average number of hashtags and URLs per tweet; the number and 17 fractions of tweets that are retweets and replied, and so forth" (pp. 16-17). Linguistic style includes the length of utterance, syntax, word choices, and pitch and gestures. User's social network refers to who and what users follow and retweet, along with who they are followed by. For this research study, I followed Ugheoke (2014) protocols in addition to taking into consideration the fact that Arabic and French are languages that have feminine and masculine features. For example, if a user says in French: "Je ne suis pas contente" (I'm not happy), the "e" in contente signifies that the speaker is a female, and the same rules of linguistic applies to the Arabic language. However, I cannot claim that all users who either stated that they were women, or I identified them as female were truly female, as many users can pretend to associate with a different gender.

Understanding the Complexity of the Data

Data were complicated due to being written in multiple languages (Darija written in Arabic and Latin letters, Standard Arabic, French, and English). For example, the Family Code was referred to in Standard Arabic written in Latin letter as "Kanoun el

ousra," in French as "code de la famille," and in English as "Family Code." Feminism

was referred to in Standard Arabic as "نسوية," in Darija written in Arabic letters as

"الفيمينيزم," in French as "Le féminisme," and in English as "feminism."

Additionally, the Darija is a complex dialect, and people from different regions

use different words to express the same thing. Also, Darija written in Latin letters

complicates things; each person can spell a word in Latin letters differently. For instance,

the Family Code was written in Standard Arabic with Latin letters as "Kanoun el ousra"

and "9anoun el ousra." Similarly, Sonia's last name was spelled as Kacimi and Guessimi.

The content was highly cultural; you have to be an Algerian (not just speak

Arabic) to really understand the meaning behind the words and expressions. For example,

the expression in Darija "ما فيهاش" literally translates to "there is not," but it actually

means "it will not happen."

Data also required knowledge of Algerian history and events. Users referred

multiple times to the Algerian revolution and revolutionary symbols such as Lala

Nsoumer and Dihya. Using acid to threaten women can call back to the terrorism era

when extremists threw acid at women who did not wear the veil. There were words that

had a different meaning when used in the Hirak's context such as the word *Kachir* (كاشير),

which means mortadella, but in the Hirak, it was used to refer to corrupt people in the

system. The word *Zatchi* (زطشي), which was used multiple times, means someone who is

backward in his thinking. There were also expressions that referred to traditional

concepts associated with religion, such as women's submissiveness to men and how

women should behave in a society.

I downloaded NVivo hoping to utilize some of the creative features it offers such as word clusters and word frequency, but I could not do much because of the multiple languages that users used to express themselves. Also, due to the richness of my data, I had to do the analysis manually. I used NVivo to keep my data organized and to create and edit categories and subcategories. Each tweet was imported to NVivo in a separate word document to make it easy to identify and track tweets. NVivo allowed me to import text and images. After all my data were organized in NVivo, I followed a coding process of five cycles.

Translating the Tweets

It is important to mention that I have a bachelor's and a master's degree in translation Arabic/English/French. I also worked as translator, and I taught Arabic/English and English/Arabic translation in Algeria, which equipped me with the necessary skills to go through the translation process. After I finished translating the posts, I consulted a translation expert, an assistant professor in translation at a university in northern Algeria, and I discussed my translations with him. Then, I took my translations to the Center for Academic Success at SHSU and discussed the final versions with a writing tutor to make sure they were correct and conveyed the meaning in English.

Data Analysis: The Coding Process

Cycles 1 and 2. I initiated the first cycle analysis where I highlighted the significant statements. Afterward, I went through the second cycle of analysis. I examined the significant statements and highlighted clusters of meaning. Cycles one and two generated 606 clusters of meaning defined by words and expressions such as: "It's not the time," "Sluts," "Dividing the Hirak," "*Kachir,*" "Protests belong to all Algerians,"

"In support of Sonia," "Against feminism," "She has the right to speak," "Democracy," and "Acid." I would like to note that the analyzed data included tweets and the comments.

Cycle 3. In this cycle, I took the time to read through the 606 clusters of meaning. I organized them in groups according to the issue each cluster of meaning discussed. For example, statements that argued that Islam freed women were put in a group, and the ones that unveiled women's oppression were in another group. Table 2 shows statements that addressed women in Islam translated from Darija, Standard Arabic and French. After I finished organizing the clusters of meaning, I ended up with 38 categories. I would like to note that NVivo allowed me to track my statement in their original context, which was helpful in creating the categories.

Table 1

Statements about Women in Islam

Islam Freed Women

Until Islam came
Islam honored women
Only Islam honored women
Algerian women are Muslims
God established equality
Islam vs others
Islam vs West
Shariaa rules
Islam is the law
Algerians are Muslims
Equality is dictated by religion
Islam gave us our rights
Harmony is brought by Islam
Rights within a religious framework
No one is above religion

Cycle 4. After cycle 3, I explored the 606 clusters of meaning and the initial 38 categories. Then, I organized the categories according to similarity or a relationship to some particular aspects. Eighteen new categories emerged. Table 2 illustrates the results.

Table 2

Cycle 4 Results

Categories	Frequency
The Acid Threat	113
Support of Feminists	97
Fake Images	91
The Debate over Freedom of Speech and Democracy	48
Debating Feminism	32
Women are Empowered	31
Negative Perceptions toward Feminists	26
It's not the Time for Feminism	23
Discussing Women in Politics	21
Feminists Disturb the Hirak	18
Slut Shaming and Sexually Harassing Feminists	16
Women against Feminists	16
Women are Oppressed	15
Islam Liberated Women	15
Verbal Abuse of Feminists	12
Violence Threats against Feminists	12

The Case of the Threatened University Girl	12
Feminists Perceived as against Religion	8
Total	606

Cycle 5. At this stage, I explored the categories from cycle 4. Based on the data presented, I found six core themes: (1) Online Abuse of Feminists (165 statements), (2) Supporting Feminists and Advancing Women's Rights (112 statements), (3) Debating Women's Rights in the Hirak (110 statements), (4) Discussing Fake Images on Twitter (91 statements), (5) Algerians' Perception of Feminists (66 statements), and (6) Algerians Do not Need Feminism (62 statements). Table 3 illustrates the results of cycle 5 in details.

Table 3

Cycle 5 Results

Core Themes	Categories	Frequency
Online Abuse of Feminists	The Acid Threat	113
	Slut Shaming and Sexually Harassing Feminists	16
	Verbal Abuse of Feminists	12
	Violence Threats against Feminists	12
		Total: 165
Supporting Feminists and Advancing Women's Rights	Support of Feminists	97
	Women are Oppressed	15
		Total: 112
Debating Women's Rights in the Hirak	The Debate over freedom of speech and Democracy	48
	It's not the Time for Feminism	23
	Discussing Women in Politics	21
	Feminists Disturb the Hirak	18

		Total: 110
Discussing Fake Images on Twitter	Fake Images	91
		Total: 91
Algerians' Perception of Feminists	Debating Feminism	32
	Negative Perceptions toward Feminists	26
	Feminists Perceived as against Religion	8
		Total 66
Algerians Do not Need Feminism	Women are Empowered	31
	Women against Feminists	16
	Islam Liberated Women	15
		Total: 62
Total		606

Ensuring User's Anonymity when Reporting Tweets

As discussed in the previous chapter, I chose the maximum concealment level: all the identifying information was changed, and it will be difficult to recognize the participants (Bruckman, 2002; Gerber et al., 2017). To properly report tweets and ensure anonymity, I discussed the issue with the College of Education librarian. After conducting research on how to report tweets, we agreed on the following: (1) use a snapshot of the tweet only when necessary and blur any information that might be linked to the user, (2) only use the content of the tweets and cite them in text as anonymous with only the first five words of the original tweet (A. Crane, personal communication, September 21, 2020). Tweets written in English were carefully reworded, and the ones written in Standard Arabic, Darija, and French were carefully translated to make it difficult to link them to the participants.

Reporting Findings: Discussion of Core Themes

Theme 1: Online Abuse of Feminists

This theme revealed the online abuse of feminists on Twitter. According to the data, the most dangerous threat feminists received was the acid threat. On April 3rd, 2019, an Algerian man residing in London posted a video via YouTube and shared it through his Facebook, threatening to throw acid at women who would carry signs or use slogans for women's rights (Les Observateur, 2019). Twitter users utilized the platform to report and denounce him. They shared his social media accounts and encouraged people to report him. They even had a picture of his ID with all his personal information exposing his full name as Toufik Hamidchi. Figure 1 shows a Twitter user sharing Toufik's Facebook profile (Anonymous 1, This Algerian living in #England).

Figure 1

Tweet Reporting the Abuser

Figure 2 displays a reply sharing information about Toufik and encouraging people to report him. They even provided a link to flag him as a terrorist threat to the

government of the United Kingdom (UK) (Anonymous 2, Toufik Hamidishi Born on 14/12/1979).

Figure 2

Tweet Sharing Information about the Abuser

After the wild spread of complaints against him, the UK police arrested Toufik, according to the Twitter account of the UK embassy in Algeria shared by a Twitter user as shown in Figure 3 (Anonymous 3, An Algerian guy in the).

Figure 3

Tweet Announcing the Arrest of the Abuser

Some Algerians reacted positively to the police response and thanked the UK government for its initiative. One user tweeted in English: "He threatened women during the Hirak and urged other people to attack them. He should pay for his actions according to the English law now. Keep us posted" (Anonymous 4, Well done, he threatened women).

However, a small number of Twitter users were against this arrest and supported the call for an acid attack. A detractor expressed his support for Toufik claiming that feminists deserved to be harmed. His tweet translates into English from Darija as: "Why! Mind your own business! He is Algerian, and he was talking about a group of scumbags in the society who wants to disrupt our religious values here in Algeria. You have no rights to arrest him" (Anonymous 5, ‏اعلاه واش دخلكم؟! كان يحكي).

This negative response toward arresting the aggressor aligned with a number of tweets verbally abusing feminists and threatening them with violence. Feminists were accused of being sluts, without morals, against religion, and wanting to walk naked in the

street. One user tweeted (Translated from Standard Arabic): "You are a slut"

(Anonymous 6, اانت عاهرة), and another one wrote (Translated from French): "They are

nothing but sluts" (Anonymous 7, C des putes ni plus). Another twitter user claimed that

people should take action against the feminists, stating (Translated from French and

Darija): "We should not hold back. If they [feminists] make a mistake, they should be

punished for it" (Anonymous 8, on doit plus céder لي).

Theme 2: Supporting Feminists and Advancing Women's Rights

Findings uncovered that Twitter users utilized the platform to demonstrate their

support to Algerian feminism and women's rights. They revealed their support to Sonia

and the feminists' square. For example, a user tweeted (Translated from French): "I

Support Sonia Kacimi" (Anonymous 9, Soutien à Sonia Kacimi). Another user defied the

acid threat and stated that women will go out and demand their rights no matter what

(Translated from Standard Arabic and Darija): "Our response is: Let them threaten us!

We will go out, we will defend our right, and we will protect our dignity #let_her_speak"

(Anonymous 10, خلينا نقولو خليهم يهددو، احنا).

Twitter was also used to share messages encouraging women to protest and rebel

against patriarchy and oppression. Empowering tweets were written to inspire women to

stand up for themselves. For instance, the following tweet said (Translated from Standard

Arabic): "#let_her_speak. This is what we want from you honorable ladies, revolt against

the male dominated society and snatch your right even if it is small" (Anonymous 11,

خليها_تهدر هذا مانريده منكنسيداتي#).

Another tweet in Standard Arabic invited women to revolt against stereotypes

around women. The tweet addressed the concept of a woman's voice as *awrah*, *awrah* in

Arabic refers to a woman's genitals, and it means something that should be hidden in private. It talked about how women are perceived as deficient in intelligence. Also, a woman who is *mutabarija*, a woman who does not wear the veil and shows her beauty, is a sinner. The tweet translates as:

> If a man tells you your voice is *awrah*, yell at him "I am a woman"
>
> If a man tells you women are deficient in intelligence, ask him how a fully intelligent man could marry a half-brained woman?
>
> If a man calls you *mutabarija*, take out your lipstick and make yourself beautiful
>
> If a man tells you your place is at home, go out and find your place
>
> Males only think they are men when they oppress women
>
> #let_her_speak (Anonymous 12a, اذا قالك صوتك عورة).

Another tweet written in Darija supported women's right to protest just like other historical Algerian female figures have done in the past. The tweet refers to Dihya (an Algerian Berber queen and military leader), three Algerian female war veterans (Hassiba Ben Bouali, Djamila Bouhired, and Zohra Drif), and Lalla Fatma Nsoumer (a central figure in Algerian history as a war general during the first years of the French invasion). The tweet translates as: "#let_her_speak She will speak just like Dihya, Hassiba, Bouhired, Drif and Nsoumer spoke!" (Anonymous 13a, خليها_تهدر كيما هدرت ديهيا#).

Similarly, a tweet referred to Dihya as a symbol of power to show women's will to fight for their rights. It translates from Darija to: "Dihya's grand-daughters do not believe in the culture of shamed and silenced women who do not demand their rights #let_her_speak" (Anonymous 13b, حفيدات ديهيه مايآمنوش بثقافه).

Twitter was a platform for women to bring attention to their struggles in the country. They mostly focused on the Family Code and violence against women. A user urged people to look into the Family Code and stated (Translated from French): "Go read the Family Code; we live in a masculine misogynic [sic] society, and it has to change" (Anonymous 14a, Allez lire le code de). The user explained her demands as (Translated from French):

Not only for me, for all women, and future generations:

No to polygamy

Ban marriage under the age of 18 for girls

Protect women against rape

Punish conjugal violence (Anonymous 14b, Pas que moi, pour toutes).

A different user claimed that the Family Code oppressed women and kept them under men's control (Translated from French):

With the Family Code women are under the guardianship of men from birth to death … It starts with the father, then power transfers to the husband … Where are we going with this … It's time to put an end to it. Moving forward should be a priority. Equality for everyone" (Anonymous 15, Avec ce code de la).

Theme 3: Debating Women's Rights in the Hirak.

Twitter hosted the debate of women's rights, democracy, and freedom of speech in the Hirak. Users relied on this platform to support women's right to speak up under a democratic state. For example, the following tweet stated (Translated from Standard Arabic): "We are a democratic country, and every citizen has the right to express his or

her views. My place and my freedom are wherever I decide, and you don't get to decide

for me #let_her_speak" (Anonymous 12b, نحن دولة ديمقراطية، و يحق لايشخص).

In another tweet written in Darija, a user claimed that denying women the right to

speak up is as oppressive as the authoritarian government they are trying to overthrow:

We didn't know that Algerian citizenship applies only to men, you are enforcing

the same oppression and tyranny the government used against you, which you

rebelled against. Algeria is for Algerian women and men equally, period! We

[women] will speak up, and we do not care about what you think (Anonymous 16,

مكناش عارفين في بطاقة التعريفمكتوبة).

Similarly, a tweet written in French reminded people of the goal of the Hirak in

achieving a free democratic state that includes everybody: "When we claim a 'a free and

democratic Algeria' it's everything, democracy is to accept everybody's point of view.

To start, we need to stop discrediting each other" (Anonymous 17, Quand on sort pour

revendiquer).

However, some Twitter users did not support women's right to express

themselves or include their demands in the Hirak. They argued that it was not the time for

women's rights, and it was not the Hirak's priority to address women's needs. This post

written in French explained: "It's neither the time nor the place for such a slogan

[Let_her_Speak] … In life we have to know how to prioritize" (Anonymous 18, Ce n'est

ni le moment). Another one stated (Translated from Darija): "Let us finish the revolution

then you can fight for your cause" (Anonymous 19, خلينا نكملو الثورة و من بعد).

Others accused the feminists of disturbing and dividing the Hirak. A reply written

in French argued:

I would like to get your attention on a very important aspect of the Hirak. Today, our priority is to fight the corrupt system. Do not get dragged by minor fights, the corrupt system wants to divide us, do not be their tools (Anonymous 20, j'aimerais attirer votre attention vers).

Women responded to the claims and stated that the Hirak should include women's demands. The following is a conversation around women's rights in the Hirak:

Tweet translated from Darija:

#supporting_Algerian_feminists

To those who say it is not the time [for feminism] and you [feminists] are disturbing the Hirak #Hirak_5_April. Rights do not have a specific time; we all seek one goal: Change and freedom. We [women] have to claim our place, and our demands should be clearly defined, so we do not get robbed of our rights and voices just like what happened to women during the revolution!! #let_her_speak (Anonymous 21a, متضامنة_مع_النسويات_الجزائرياتاللي#).

Reply translated from Darija:

I tell you it is not going to happen, it is not the time (Anonymous 22, انا نقولك مافيهاش ماشي).

Reply from the tweet's author translated from Darija:

No one asked your opinion! (Anonymous 21b, حتى واحد ما طلب رايك).

In another conversation, two Twitter users debated women's rights in the Hirak. The texts are replies on a Tweet using #let_her_speak.

Reply translated from Darija:

We need to have only one goal and it is the system. If you [feminists] enter the Hirak with a different goal, the Hirak will be divided and anarchy will reign. Please do not disturb the Hirak, it is all we have left (Anonymous 23, Lzem ykon hadef wahed w l bute).

Reply translated from Darija:

The family code is part of the corrupt system, I personally do not seek to disturb the Hirak but to raise awareness about women's rights (Anonymous 14c, 9anoun el ousra fait partie).

Theme 4: Discussing Fake Images on Twitter

According to the tweets, edited pictures of feminists had been circulating. For example, in a reply for a tweet addressing #let_her_speak, a user who claimed to support women's rights argued that feminists are manipulated by the government to disturb the Hirak, do not respect god, and should not be allowed in the popular movement. The user also shared a picture of a woman holding a sign that insulted God. Figure 4 translates from Darija (Anonymous 24, لا يستغلونكن للاسف عندها بلا):

They just take advantage of you [feminists], we were talking about the corrupt system and now the discourse is about you. The Hirak will not gain anything like this.

Is it right to insult god? Don't you have any better signs, you ruined the image of feminists and you embarrassed us. Thank you

#I_support_Algerian_feminists

The sign translates from Darija and French to:

Brother, I will get my rights with or without God.

Daughter of Dihya and Fatma

Kiss

Figure 4

Edited Photo to Hurt the Feminists Image

Someone replied that the picture was edited to hurt the feminists' image. Figure 5 presents two pictures claiming one as fake and one as real. Translation from Darija and French states (Anonymous 21c, :(للاسف الصورة هذي خدموها غير

Unfortunately, this picture was edited to hurt the image of feminism

 Here is the original, and it was from the fourth Friday of the protests.

Picture 1 on the left addressing the corrupt people in the system: (Real)

Get out of the government!

102

You will leave the system no matter what

Picture 2 on the right: (Fake)

Brother, I will get my rights with or without God.

Daughter of Dihya and Fatma

Kiss

Figure 5

Addressing Fake and Real Pictures

*** Theme 5: Algerians' Perception of Feminists***

Some Twitter users utilized #let_her_speak to address the goal of feminism.

Findings uncovered that feminism was perceived negatively. Feminists were viewed as

people encouraging women to be indecent as argued in this tweet (Translated from

Darija): "You want to walk naked? Respect yourself and others will respect you"

(Anonymous 25, احترم- ؟ عريانين تمشو حبين). Feminists were also accused of bringing

Western ideologies to undermine the Algerian society as this tweet claimed (Translated

from Darija):

> You [feminists] want to introduce Western cultures that undermined themselves,
>
> so that you can destroy the Muslim and stable Algerian society and spread
>
> concepts that are against religion. The feminism that you talk about emerged in
>
> societies that oppressed women, but for us women do not need anything
>
> (Anonymous 26, ثقافات تدخلولنا بيكم نتوما).

Some users responded to the negative depictions of feminism and supported

women's demands in Algeria. A user defended feminists stating (Translated from

Standard Arabic):

Dear male brother, why do you believe that if a woman goes out to demand her

rights, she wants to get naked and ruin the country, or that she threatens your

social status? The country is big enough for everybody, so why do you

monopolize it and silence women saying that Islam gave them rights? Don't speak

about Islam, and you, who claims Islam, does not even know how to utter Allah's

name in a prayer #let_her_speak (Anonymous 12c, لماذا تعتقد اخي الذكر ان).

Other users accused feminists of being against religion. An opponent of feminism

challenged their campaign as anti-religious (Translated from French): "Feminists stop

your hypocrisy and be honest with us and with yourselves! Admit that your problem is

with Islam and not with equality #let_her_speak" (Anonymous 27, Les féministe, arrêtez

l'hypocrisie, soyez). Another critic of the women's rights movement also called feminists

hypocrites who seek to undermine Islam (Translated from Darija): "The problem is

steeped in the feminists' hypocrisy. They seek to erase all Islamic values that our

government is still holding on to" (Anonymous 28, هاذو .. البروبلام في النفاق برك).

Theme 6: Algerians Do not Need Feminism

Findings revealed that some Twitter posts believed that Algerian women are

already liberated and do not need feminism. They claimed that women have access to the

job market and education more than men. The following Twitter conversation shows a

debate between a user who believes in women's rights and another one who does not. It

translates from Standard Arabic and Darija as follows:

Tweet:

Dear male brother, why do you believe that if a woman goes out to demand her

rights, she wants to get naked and ruin the country, or that she threatens your

social status? The country is big enough for everybody, so why do you

monopolize it and silence women saying that Islam gave them rights? Don't speak

about Islam, and you, who claims Islam, does not even know how to utter Allah's

name in a prayer #let_her_speak (Anonymous 12c, لماذا تعتقد اخي الذكر ان).

Reply:

What rights are you talking about, you (of course you do not represent all women)

say that it is a patriarchal society; however, you [women] compete with us in the

work sector, in communes, in schools, companies, and in everything else while

male youth are unemployed. The Algerian law protects you in case of harassment

(Anonymous 29a, عن أي حقوق تتحدثون ، بمنظوركم).

The tweet's author replied:

We do not need your permission to work, we are part of this society, no one is

better than the other, and I wish we do not limit women's rights to just work, the

family code is not fair to women (Anonymous 12d, نخدموا بلا مزية حد، رانا).

Reply:

You either like it or not, women's chances in the job market are higher than men.

If you do not believe that women are empowered in Algeria, then it means you are

far from reality. You can speak when our chances are equal; you are only

disturbing the Hirak (Anonymous 29b, تبغي ولا تكرهي المرا راه).

Some users argued that Islam freed women. User one stated that Allah honored women, and it is their own fault if they suffer from inequality. However, user two claimed that she did not feel honored and quoted discriminatory sayings that are associated with religion. The conversation translated from Standard Arabic, Darija, English, and French as follows:

User One:

If you believe that you [as a woman] are a slave then you are a slave, all mighty Allah honored and highly valued women. You [women] became slaves with your immorality and your indecency. I ask Allah for protection. Our prophet was right when he said that he saw a lot of women in hell and asked them to atone for their sins through donations. Your [feminist] ideas are bubbles, and we need to pop them, wait and see! (Anonymous 30, مادمت تظنين نفسك جارية فأنت).

User Two replied:

LMAO! Best joke! Where is the honoring?! LOL, I am not against religion, I identify as a Muslim woman, but we should not utter none [sic] sense LOL.

Image (Religious misconceptions about women):

Islam honored women (laughing smiley)

Women are Awra.

Women come in the form of the devil.

Most people in hell are women.

Women are the fuel for hell.

Women lack brains and religion.

Women interrupt prayers like donkeys and dogs.

Women are damned by angels.

Women are adulterers when wearing perfume in public (Anonymous 14d, Lmao, best joke, ayna houwa).

Findings also revealed that some self-identified female users were against feminists, arguing that they did not feel oppressed. An opponent of feminism, who identified as female, published an anti-women's rights post. It translates from Darija into: "If you are oppressed or have been abused, it is your problem. We [women] do not need anything. We are not slaves or servants. Speak only for yourself! (Anonymous 31, الا راكي مقهورة و مظلومة و الا). Another female user stated (Translated from Standard Arabic): "I, as an Algerian woman, agree with men who say that women are free. Thank Allah, Algerian women have all their rights and do not need anything. People who say that women are oppressed are ignorant" (Anonymous 32, انا كامراة جزائرية اشاطره الراي).

Summary

This chapter presented an analytical description of qualitative data collected from Twitter. The first part of the chapter addressed how data were collected and cleaned. The second part described the data analysis through a five-coding process. The last part discussed the core themes. Six themes emerged from this study: (1) Online Abuse of Feminists, which addressed the verbal and physical threats feminists faced for their activism during the Hirak; (2) Supporting Feminists and Advancing Women's Rights encompassed conversations around women's oppression and supporting the feminist agenda; (3) Debating Women's Rights in the Hirak discussed the status of feminism in the popular movement; (4) Discussing Fake Images on Twitter uncovered how feminists' photos were edited to hurt their image during the Hirak; (5) Algerians' Perception of

Feminists which revealed how feminism was negatively viewed; (6) Algerians Do not

Need Feminism debated the need for women's activism in Algeria. Chapter V will

discuss the findings within the review of literature and the theoretical framework.

CHAPTER V

Discussion and Conclusion

Introduction

      This chapter discusses the findings of this study and makes connections to the body of research on women's digital practices and to cyberfeminism as a theoretical framework. The findings of the study addressed the research questions with regard to: (a) the impact of Twitter on women's activism, (b) the role of Twitter in articulating women's identities, and (c) Twitter as a platform for political participation. Findings indicated that women's activism via Twitter went through a simultaneously empowering and oppressing dynamic. Women utilized Twitter and #let_her_speak to advocate their right to express themselves and voice their concerns during the Hirak. Women relied on the speed, interactivity, and flexibility of social media platforms to support the feminists' demands and place women's rights in the Hirak. This study's findings mirrored the body of research that considered social media as a game changer for gender equality and viewed Twitter as a powerful instrument to push women's issues onto the public agenda.

Connecting the Research Questions to the Review of Literature

What is the Impact of Twitter on Women's Activism during the Hirak?

      Twitter Anonymity Features: A Ticket for Open Expression. Scholars viewed social media platforms as a powerful tool for women to take part in political debates without being identified (Altuwayjiri, 2017; Guta & Karolak, 2015; Jarbou, 2018; Newsom & Lengel, 2012; Schuster, 2013). The anonymity feature encourages women to share their experiences and views openly and honestly (Guta & Karolak, 2015; Somolu, 2007). It emboldens them to address topics they wouldn't dare talking about in public and

open up about taboos. In this current study, users adopted multiple approaches of identity concealment. For example, they used nicknames, did not use personal pictures in their profiles, and avoided using family names. This enabled them to open up about their personal experiences without revealing their identities and to criticize social norms without compromising their safety.

Restricted Public Sphere: Finding Refuge on Twitter. Women in some countries are restrained from accessing the public sphere, which alienates them from political and social participation (Altuwayjiri, 2017; Guta & Karolak, 2015; Jarbou, 2018; Radsch & Khamis, 2013; Turley & Fisher, 2018). In this study, addressing women's rights in the public sphere during the Hirak represented a threat for women, especially after the attack on the feminist square, which alienated their claims and excluded them from the Hirak's demands. Consequently, women have turned to Twitter to create a virtual public sphere to compensate for their lack of power in the physical space and to include women's rights in the Hirak. Digital activism puts women's issues at the center of events where they cannot be ignored anymore (Altuwayjiri, 2017; Radsch & Khamis, 2013). Findings indicated that Twitter served as a platform to shed light on women's struggles in the country. Reforming the Family Code seemed to be at the top of their demands. Women have contested the Family Code since Algeria gained its independence (Hayef, 1995; Lloyd, 2006 Messaoudi & Schemla, 1998; Salhi, 2003), and it seems that they haven't achieved a fair law yet. Women also condemned violence against women, unfair access to the work force, and the lack of women engagement in politics.

Online Abuse of Feminists on Twitter. According to Duggan et al. (2014) cyber harassment is highly visible on social media platforms. Feminists are frequently attacked,

trolled, and bullied online for voicing their opinions and experiences on sexism and gender equality (Eckert, 2018; Lewis et al., 2016; Turley & Fisher, 2018). Online spaces are a reflection for real world patterns, and they create an environment for social and cultural reproduction (Eckert, 2018; Lewis et al., 2016; Puente et al., 2017). In this study, Twitter did reflect the real-world patterns of the Algerian society, and verbal attacks and threats of physical abuse took place. Feminists were threatened with acid attacks and were verbally abused on Twitter. They were called names such as: "sluts," "ugly," and "prostitutes." The biggest threat they received was when the Algerian man who lived in London took advantage of the connectivity that social media platforms offered to mobilize his followers in Algeria to throw acid on feminists during the Hirak.

Multiple studies showed that women developed different counter strategies as a response to threats (Duggan et al., 2014; Han, 2018). This study's findings indicated that Algerian women chose to expose their abuser on social media. As a response to the acid threats, women and men campaigned online to report and expose the Algerian man from London as an offender through social media. They shared his Facebook profile and his personal information and called other people to share and report him. According to the findings, the campaign reached the British government, and the man was arrested. Few days later, the man from London shared a new video via social media platforms, and apologized for his actions, stating that he was just angry and did not mean to hurt Algerian women (La Rédaction, 2019).

How does Twitter Provide Opportunities for Women to Articulate their Identities during the Hirak?

Online blogging provides women with the opportunity to contest, negotiate, and rewrite women's issues (Taylor, 2011). According to Coleman (2005): "As a vehicle of self-representation, blogs diminish people's need to be spoken for by others" (p. 276). In this current study, women utilized Twitter to define their identities as Algerian feminists and Muslims.

Women and Religion: Twitter Hosting the Gender Debate. AbuKhalil (1993) discusses an apologetic Islamic school claiming that Islam has freed women. He argues that this school tends to amplify the progress that Muslim women achieved after Islam. This notion of freedom is conceived with a comparison of women in pre-Islamic times and women under the reign of Islam (AbuKhalil, 1993; Sidani, 2005). These ideals of free Muslim women are uncovered in the findings. For example, a Twitter user clearly states (translated from Arabic): "If you compare between women's rights in Islam and women's rights in pre-Islamic times, or other civilizations, you would realize that women are greatly honored in Islam" (Anonymous 33, ومن قارن بين حقوق المرأة في الإسلام). However, the Islamic apologetic school does not promote a modern interpretation of Islamic texts, and it does not represent women's issues in modern times.

Chaudhry (2016) challenges the use of religious language to advocate women's rights. She argues that religious leaders have no interest in reforming patriarchy. She also notes how characterizing patriarchal laws as "Islamic" silences citizens calling for gender-equality, and it allows religious leaders to label any criticism from other nations as orientalism, imperialism, and Islamophobia. This study's findings revealed that

Algerian women were not satisfied with the religious discourse. Through Twitter, they found the space to identify as Muslim women and at the same time critically address the religious gender debate within modern times and current social and cultural contrasts. Women used Twitter, where they felt relatively safe, to draw attention to the fact that these religious claims do not reflect the living reality of Algerian women. This way, women lifted the taboo on debating religion. They argued that as Muslim women the claim of Islam honoring women doesn't persuade them anymore as it doesn't apply to their current living situation. They stated that the use of religion to silence women is weak and called for a reinterpretation of religious texts and a reconsideration of what is considered as religious norms. Some women demanded to put the religious discourse aside to shift the focus on the real issues that Algerian women struggle with.

The Fbomb: Redefining Feminism in Algeria through Twitter. While feminism might hold a positive and empowering connotation to some, many regard feminism as a negative thing (Jenen et al., 2009). Claiming feminism in public carries the connotation of challenging the key views of sexual morality, norms, and values of the society (Han, 2018). The findings reflected the underlying negative perceptions and misconceptions towards feminism. Feminists were viewed as unethical people who would corrupt the virtuous and religious Algerian society. They were accused of bringing Western values that seek to undermine social norms. They claimed that women in Algeria do not need feminism because Islam already freed them. These misperceptions may explain why some women in this study opposed feminism, regardless of whether they agreed with the feminism agenda for political, social, and economic equality. They saw it as a western export and conflicting with the traditional Algerian lifestyle. These findings

align with the body of research (Liss et al., 2001; Zucker, 2004). According to Jenen et

al. (2009), people reject feminism out of the fear of not conforming to social norms:

"People are generally unwilling to associate themselves with a marginalized social group

because they fear this would put them at a social disadvantage" (p. 15). However, women

took advantage of Twitter to re-establish the definition of feminism in Algeria. They

defined their activism as fighting for basic human rights and denouncing the Family Code

and violence against women. For example, when feminists were accused of being

immoral and corrupt, women questioned those claims by connecting to the actual

feminists' agenda in Algeria. These digital conversations generated a new definition of

feminism in Algeria and opened new forms of gender awareness as Thelanderson (2014)

stated: "The Internet provides a space where feminists can learn from each other about

why things some feminists see as harmless can be hurtful and offensive to others" (p.

529).

Algerian feminists used Twitter to declare that they will not be silenced or

shamed for demanding their rights, and they are no longer scared of being labeled or

threatened. They defined their feminist identity as non-Western Muslim Algerian women

who do not want to "walk naked in the streets," nor "disturb Islamic values," but have the

right to bring their struggles within the Algerian society to the center of political change.

How does Twitter allow Algerian Women to Establish New Roles of Political

Participation during the Hirak?

Twitter as a Platform to Demand a Voice in the Hirak. Online activism

enables women to impact politics on a micro level and voice their experiences to the

political debate (Jackson, 2018; Odine, 2013; Schuster, 2013). Through social media,

women include their agenda within the mainstream discourse where they are not considered unworthy of political change. In the current study, Twitter was a tool used to influence women's rights in the Hirak's demands, even though they faced a lot of resistance from their fellow protestors. Studies have shown that people in the Arab world strive for democracy (Kostenko et al., 2016; Tufekci & Wilson, 2012). According to Inglehart et al. (2003), democratic aspirations and attitudes towards gender equality are highly correlated. However, the debate over women's rights in the Arab world is very controversial (Cherif, 2010) as research shows how the relationship between support of democracy and gender equality is very low in the Arab region (Kostenko, et al., 2016).

According to Odine (2013) women are encouraged to use social media to voice their concerns and advocate for their rights instead of waiting for governments to represent them. Research showed that Twitter hashtags are good opportunities to connect one's tweets to a larger cause or discussion (Jarbou, 2018; Latina & Docherty, 2014; Skinner, 2011; Yuce et al., 2014). Hashtags facilitate campaigns' accessibility to a bigger audience, and it is immediate and easy to track (Turley & Fisher, 2018). In this study, women used Twitter to push women's rights into the Hirak's agenda. To associate their demands with the Hirak, they paired #Let_her_speak with other Hirak known hashtags such as: #You_will_all_be_removed (يتنحاو_قاع#), and #April_5_Hirak (حراك_05_أفريل#). This way, women formed a transnational digital connection between two movements: The Hirak and feminism.

Politicizing Women's Rights: Lesson Learned. The findings of this study mirror Algerian women activism during social and political change movements throughout history. During the Algerian war for independence (1954-1962), women

participation was pivotal to the war (Salhi, 2003). However, women were asked to keep their feminist agendas aside and focus on the national liberation (Lloyd, 2006). After Algeria gained independence (1962), the government faced difficulties to support women's rights (MacMaster, 2007). After the terrorism era, the deposed President Bouteflika stated that the number one priority of the government was economic stability, and he argued that Algerian women should wait for the society to accept change (Salhi, 2003). Similarly, findings showed that feminists were accused of disturbing and dividing the Hirak. People claimed on Twitter that the Hirak's demands should not include women's rights, and it's not the time to address women's issues. Women were simply asked again to wait for their turn to speak and keep their agenda aside.

Women showed a certain level of awareness that history was repeating itself, and this time they refused to sit back and watch. They referred to how women were silenced before, and this time they will take their destiny in their own hands and advance their rights. They also showed a high level of political awareness and had a better understanding of their rights as Algerian citizens. They argued that if the Hirak claims democracy and freedom of speech for Algerians, then Algerian women are citizens who should have the right to express themselves. If the Hirak demands better living conditions for Algerians, then Algerian women are also citizens and should be allowed to address issues that affect them, stating that the Family code is part of the corrupt system. They also argued that oppressing women's voices is similar to the dictatorship that the Hirak is fighting. Women established their presence in the political scene and debate to make sure they were not excluded from political change and to ensure their equal citizenship rights. In this case, Twitter was considered as a platform to support a democratic society.

Connecting the Findings with the Theoretical Framework

CyberFeminism: Connectivity, Critique and Creativity

Connectivity. Hawthorne and Klein (1999) stated that connectivity is central to feminism. Technology allows feminists to facilitate the spread of information and reach out to targeted people. They argued that technology empowers cultural change and opens new opportunities for activism. Feminists understood the power of sharing information and building communities online for their activism (Jackson, 2018; Rentschler & Thrift, 2015; Schuster, 2013).

In this study, Twitter gave women the platform they needed to talk about their experiences and connect with peers. Twitter gave them the opportunity to find like-minded people to discuss their issues and not feel isolated. This network of connectivity helped in creating a culture of support and response to women's issues. It created a new and boundless consciousness of women's issues in the public sphere and promoted a dynamic engagement. Through Twitter, it was possible for women to get campaigns to promote their agenda. They brought the attack on the feminist square to light by connecting #let_her_speak with other hashtags around women's rights such as: #Women_are_revolutions_not_Awra (المرأة_ثورة_و_ليست_عورة#), #Abolish_shameful_laws (يسقط_قانون_العار#), and #Feminism. These connections emphasized the need for feminism by linking the specific, which is violence inflicted on feminists, to larger narratives of gender inequality.

To make sure that every woman's voice is heard and documented, women used Twitter to encourage other women to speak up for their rights and revolt against the patriarchal society. They shared empowering pictures of women in the protests and

women carrying feminist slogans. They used Sonia Guessimi as a symbol of resistance and tagged her pictures with #MyHeroToo. They wrote powerful slogans and poems expressing their willingness to fight and not hold back. This feeling of collective empowerment helped them assert their insistence to be in charge of decisions and issues that affect their lives.

Critique. Hawthorne and Klein (1999) emphasized the importance of having a critical perspective toward cyberspaces. Many researchers argued that the disembodiment of digital platforms interrupts the understanding of the process and performance of gender norms (Brophy, 2010; Foster, 1999; Sundén, 2001). In this research, Twitter was a platform to create a new culture of feminism that brings together online and offline feminism and focuses on local issues. #Let_her_speak seemed central to redefining Algerian feminism through blending digital activism, where the discussions play out in disembodied and anonymous forms, with local protests to assert the female body as the contention ground in the politics of gender, religion, sexuality and culture in the current time. Along with #Let_her_speak, feminists organized gatherings across major cities to reinforce their presence and continued asserting their place in the Hirak.

Hawthorne and Klein (1999) highlighted the fact that online sharing is public property and can be exploited positively and negatively. They explained that any information available online is public property and can be misused by anyone. Findings revealed that some Twitter users edited pictures of feminists during the Hirak holding pro-women's rights slogans to tarnish their reputation. They changed their slogans to expressions that were offensive to religion to re-establish the notion that feminists are

against religion. However, some women seemed aware of the falsity of the modified

picture and quickly responded by sharing the original pictures.

In this current study, women showed a level of understanding of how sexism and

other forms of oppression are part of the online experience. Feminists were threatened via

social media to be harmed physically if they continued their activism. Instead of

submitting to the threats, they utilized the same outlets their abuser used to stop him.

They campaigned online and forced him to apologize.

Creativity. Algerian women used Twitter to debate the definition of feminism

within the Algerian society and connect it to local issues. They became active creators of

their own stories, as well as advocates and disseminators of information that is important

to them. Social media becomes a valuable asset when different individuals across social,

political, religious, and geographical constraints share knowledge. Thelandersson (2014)

argued that: "An inherent and large part of privilege is the unawareness of experiences

other than one's own, and a belief that everyone lives under the same material, social, and

cultural conditions, with the same opportunities available to them" (p. 529). Women

seized the opportunity to allow their personal experiences to become political and create

a supportive community for their demands. It granted them the feeling of empowerment

which is a key element for social and political change. Social networking has the ability

to generate "real" political participation, emphasizing the importance of creating virtual

communities in politics (Altuwayjii, 2017). By empowering marginalized women,

Twitter provided a more democratic mode of communication. Women discussed how the

Family Code, access to the public space, and violence against them affected their lives.

Through bringing stories from all the spectrum to light, women's lives were explored

through a gender-conscious lens and challenged the traditional and patriarchal schools of thinking. They raised awareness about these issues and how important it was to address women's rights and include them in the Hirak to achieve equality and democracy in the nation.

Implications and Recommendations in the Field of Education

With the rise of social media as an alternative platform for political change, it is becoming imperative for the field of education to understand the impact of digital literacy practices on students' civic and political engagement. Engaging in activism and participating in platforms that enable oppressed groups to voice their concerns is valuable in and of itself (Carney, 2016); however, research has shown that young people lack interest in politics (Zhu et al., 2019). Policymakers and educators have been concerned about this disinterest and pointed to how the disengagement of the youth can threaten the legitimacy of democracy (Kaid et al., 2007; Zhu et al., 2019). Many researchers examined the possibility of promoting political engagement through social media (Ekström & Östman, 2015; Eynon & Malmberg, 2011; Bakker & De Vreese, 2011; Gil de Zúñiga et al., 2012; Moeller et al., 2014; Moffett & Rice, 2018; Tang & Lee, 2013; Tufekci & Wilson, 2012; Zhu et al., 2019). Women's activism during the Hirak uncovered a few digital practices that can be incorporated to boost learners' political participation.

Confronting the Digital Divide

Even though the current study did not directly discuss the issue of digital divide, it is crucial to address learners' digital accessibility, skills, and use to ensure digital equity for everybody. Eynon and Malmberg (2011) argued that it is the responsibility of formal

education to provide a space for access and support to facilitate the development of digital literacy skills and to properly use technology in the classroom to boost the learning process inside and outside formal education. Rowsell et al. (2017) urged educators to be aware of any digital disparities in their schools and be persistent advocates for an equitable and humane distribution and use of digital resources inside and outside schools.

Understanding Learners' Social Media Use

Eynon and Malmberg (2011) argued that understanding students' digital use might help inform educational policies and practices to provide the necessary skills, knowledge, confidence, and access to all learners. Ekström and Östman (2015) introduced three forms of social media users: (1) information users who seek social media to gain advice, educate themselves, and satisfy their curiosity, (2) interactive users who utilize social media to communicate and interact with like-minded people, and (3) creative users who are motivated by self-expression, and they tend to publish their creative work online, seeking an impact, a reputation, or a leadership position (Zhu et al., 2019).

Many studies have investigated the relationship between social media use and political engagement. Researchers have revealed that information and interactive uses of social media impact online and offline political participation directly and indirectly (Bakker & De Vreese, 2011; Gil de Zúñiga et al., 2012; Moeller et al., 2014; Moffett & Rice, 2018; Tang & Lee, 2013; Tufekci & Wilson, 2012). Moeller et al. (2014) found that young people are best informed through online resources. When adolescents actively engage in communication processes such as writing messages, taking part in online

discussions, or just forwarding political messages to their peers, their level of internal political efficacy increases significantly leading to political participation. In their study, Ekström and Östman (2015) found creative production to be a direct positive predictor of youth's online and offline political participation. Zhu et al. (2019) encouraged educators to incorporate creative production in social media into the teaching and the learning processes to motivate young people's political participation. These studies shed light on the importance of social media use in shaping political behavior.

Encouraging the Personal to Become Political

According to Moeller et al. (2014), allowing learners to address political issues through personal experiences helps them process information and become more engaged. For example, the digital literacy practices of Algerian women during the Hirak created an online supportive community, where their personal experiences intertwined with political demands, to make their voices to be heard. Similarly, educators could encourage their students to consider social media to explore issues that matter to them and encourage the marginalized to express themselves (Keller, 2012; Somolu, 2007; Taylor, 2011). Eynon and Malmberg (2011) suggested incorporating creative activities such as: "creating videos, artwork or podcasts, writing and sharing stories and composing; exploring future career plans and developing skills to achieve those goals; getting involved in debates about issues of interest (Davies, forthcoming); and information seeking" (p. 593). People who express themselves on their social media feeds show more willingness to participate in offline spaces in a range of civic and political behaviors as it boosts their confidence to engage in other spaces (Boulianne, 2015; Vraga, 2019).

However, social media users are required to have the necessary skills to identify, evaluate, select, and generate information (Eynon & Malmberg, 2011; Zhu et al., 2019). The current study highlighted a few aspects of social media use that should be considered to support learners in their digital practices.

Developing a Critical Perspective toward Social Media

It is important for learners to be aware of the empowering and disempowering nature of online spaces. Learners must understand that social media platforms are not utopian spaces; however, they exist within a social construct that carries cultural, economic, and political practices that embody sexist and racist conditions (Eckert, 2018; Lewis et al., 2016; Puente et al., 2017). These platforms reflect real life oppressions that learners might be subjected to. For example, users might be attacked, trolled, and bullied online for expressing their opinions and experiences on sensitive subjects such as race, sexism, and religion (Eckert, 2018; Lewis et al., 2016; Turley & Fisher, 2018). Because the online and offline experiences are intertwined, the cyber harassment of users is not restricted to online spaces only and could extend to offline abuse (Eckert, 2018).

Learners can be taught to adopt certain response strategies against online abuse. For instance, women during the Hirak took advantage of the anonymity features to conceal their identities. They used pseudonyms and non-personal pictures in addition to not disclosing any personal information or location. Another strategy uncovered in this research was exposing abusers through social media platforms, which is an approach used by many online activists (Duggan et al., 2014; Han, 2018).

It is also crucial for learners to comprehend that information available on social media is public property and can be used positively or negatively. As this study revealed,

images can be edited to manipulate certain beliefs about current events and stir up controversy (Shen et al., 2019). The easy access to sophisticated photo-editing tools, usually only available to professionals, is aggravating the spread of fake images, also called phony or doctored images, on the Internet (Anastasia & Frank, 2018; Marra et al., 2018; Shen et al., 2019). According to Anastasia and Frank (2018), social media users are more likely to share images than plain text. It is also argued that fake images can be more powerful than fake news because people are more likely to believe what they see than what they read (Shotz, 2019).

Experts suggested that human judgment is the best strategy of defense against fake images (Anastasia & Frank, 2018; Marra et al., 2018). They argued that if an image triggers a strong emotional reaction, it's a warning sign to critically address it, check the source, and ask questions (Anastasia & Frank, 2018; Lamb, 2017; Shotz, 2019). Additionally, there are many digital media literacy websites that offer different resources, workshops, and courses for educators and learners to develop the necessary skills to be smart consumers of online information, such as The News Literacy Project, KQED, Media Literacy Now, and Common-Sense Education.

Recommendations for Future Research

This study provided information about the role of Twitter in women's activism during the Hirak and how it helped them shape their identities and encouraged their political participation. To highlight the value of women's digital practices in social media platforms, several recommendations deserve attention for future study.

First, the current research investigated the digital practices of women who seemed to have the necessary digital skills and accessibility to use Twitter to support their cause;

therefore, it did not cover the gender digital divide. To address this aspect, future research

might be conducted to examine the impact of patriarchy, accessibility, use, and digital

literacy skills in women's digital practices in Algeria.

Second, findings indicated that Twitter was a powerful tool for women to include

their agenda in the Hirak's demands. However, the situation of women's rights in the

Hirak's aftermath remains unclear. On December 12, 2019, Algerians elected

Abdelmadjid Tebboune as their new president. Many corrupt figures, such as two former

prime ministers, were brought to trial in court, and the Hirak was halted by the

unprecedented spread of the coronavirus. Consequently, it is recommended future

research examine the status of women's demands after the Hirak and the outcome of

women's online activism.

Third, the current research is not representative of all women's digital activism. It

only focuses on Twitter and one specific hashtag. Future research might be conducted to

explore women's online activism using different hashtags and other social media

platforms such as Facebook, Instagram, and Tumblr.

Summary

Chapter V addressed the connection of the findings to the research questions and

the review of literature. It showed that women's digital practices were focused on

creating an online platform that allowed them to express themselves, report digital

harassment, debate feminism and religion, and impose their demands in the Hirak. The

findings were also discussed within the theoretical framework of CyberFeminism. The

discussion illustrated how connectivity, critique and creativity are holistic elements of

women's cyberactivism. To highlight the importance of the use of social media to boost

political participation in the field of education, this chapter developed few

recommendations to inform future education policies and practices. Finally, future

research recommendations in regard to women's digital practices were discussed.

CHAPTER VI

Closing Thoughts

Personal Thoughts and Connections of An Algerian Woman

I was born and raised in Algeria. I consider myself a lucky woman because I grew up in a family that encouraged me to read, think, and critically address issues. When I was 18 years old, I asked my father, may he rest in peace, about women in Islam and in Middle Eastern societies. Instead of lecturing me, my father handed me a stack of books, and asked me to read them and develop my own understanding of women's status. Among those books were two special ones that gave me a whole new perspective in regard to the debate on women's rights. The first book was The Liberation of Women by Qasim Amin. Considered as one of the Arab world's first feminists, Qasim brought new interpretations to the Quran addressing women's rights. His interpretations were different from the mainstream ideas, and I could not believe that a religious scholar could actually seek to advance women in an Islamic society. The second book was The Veil and the Male Elite: A Feminist Interpretation of Islam by Fatema Mernissi. Fatema was a sociologist and one of the founders of Islamic feminism, and she devoted her career for women empowerment. In her book, she examined the political participation in history of the wives of the Prophet, peace be upon him. It was enlightening and empowering. For once in my life, I felt that someone legitimized my concepts of women's roles in the society as strong leaders. My mother also contributed to my readings and introduced me to Nawal El Saadawi. Nawal, a physician, a feminist, and an activist, brought women's struggles to the center of attention by actually working with oppressed women and

reporting their struggles. Nawal's work took feminism from under the shadows of religion and shed light on the real living situations of women.

After this awakening experience, I started to wonder: How come I have never heard of feminist religious scholars before? Why are these controversial conversations not happening outside my family and these books? Why is the debate around women single-minded? Why is the discourse around women's rights framed within "Islam honored women," and "We do not feminism?" Where does my voice go? Where do I put my experiences as an Algerian woman in this society? Where does my neighbor who gets beat up every night by her husband and is expected to put a smile on her face the next morning fit in "Islam honored women?" How come every time a girl or a woman steps into the public sphere, she is considered fair game? How do we, as women, bring to light our voices and experiences?

I personally did not feel that my voice and experiences were valid. Why would they be? Islam freed women, and I am a Muslim. What do I have to complain about? Growing up, I could not find a space where I could be heard outside the circle of my family. While men had cafés and clubs to discuss issues that mattered to them, women were chained to the private sphere, burdened with gender roles imposed on them by society. The absence of the conversation around women's experiences held back the feminist agenda from taking place in the political scene where critical policies that served the people were drafted. However, I have noticed that women's awareness around the importance of voicing their concerns has gradually increased, but they still have not found the space to expose their oppression in society until social media arrived. I remember when Facebook came out, it was a platform where we shared cute pictures and

made friends. With time, Facebook and other social media platforms morphed into a loud place where people complained, debated, or argued about something, and women realized that they can take part in these conversations and still protect their identity if necessary. They set their voices free, unleashed their anger toward society, pointed fingers, created support groups, and imposed themselves into the public debate.

When the Hirak started, women asserted their place as Algerian citizens both in the physical and the online space. They marched in the protests and debated political matters on social media. What I thought was very notable while working on this research study was the bravery Algerian women embraced to challenge the prevailing perceptions around women's rights and not only impose their personal experiences, but also push them to be included in the framework of change. I was impressed to see women taking up Twitter to dismantle misconceptions around their situation and open up about taboos. In a religious society like Algeria, Islam is a no-touch zone, which means anyone who attempts to open the religious debate to new interpretations and ideas is labeled as a disbeliever. However, this study revealed that women are not silenced anymore with Islam. Working on my data and analyzing how women are tweeting to break down the religious defense mechanism that society shields itself behind was very empowering to me. I felt validated and that I was not the only one who did not feel "freed" by Islam. Even though I still hear those voices deep down inside of me playing the religious card, I feel emboldened by these women on Twitter to speak up.

I have to admit that reading through my data sparked a wave of undesirable emotions. For example, I was enraged when I read tweets arguing that women in Algeria were not oppressed. It delegitimized every oppressive experience I have ever lived and

marginalized my voice. To my surprise, women aggressively tweeted back and fearlessly brought back their experiences with discrimination and oppression to the table of discussion. It was impressive to see them give power to their vulnerability and fight back the claims that sought to silence them. Exposing women's living conditions in the virtual public sphere lead to the politization of women's rights. Women not only demanded to be heard, but also to include their agenda in the Hirak. When they were told that it was not the time for their claims, women reshaped the debate to make the time for their demands. Online they defended their right to be part of the change, and offline they chanted for women's rights in the protest and created feminists' squares around the country.

Unfortunately, challenging the status quo on social media comes with a price: opening yourself to verbal and physical abuse. It is very important to highlight that social media platforms are a reflection of the societies they exist in. The oppressive and discriminatory practices that take part in a society do not disappear in online spaces. Just like this study showed, women face rejection, insults, and even physical threats when they express their dissatisfaction with their living conditions and demand change. Social media platforms carry such an empowering and oppressing dynamic, that it is crucial to tackle them with the proper skills and knowledge to ensure a safe and beneficial experience, and that is where the role of digital literacy skills come to light.

As educators, we have to continually assess and evaluate the learning process of our students. It is becoming clear to us now that learning goes beyond schools and formal education, and social media platforms are shaping the knowledge that students are exposed to. This makes it crucial for educators to address learners' digital literacy skills. Just like my father handed me books and encouraged me to explore my topic of interest,

students should be equipped with the proper tools to critically utilize social media

platforms for their own benefit.

Finally, I would like to end my dissertation with what I consider the most

powerful and inspiring tweet in this study (Anonymous 12a, اذا قالك صوتك عورة):

 If a man tells you your voice is *awrah*, yell at him "I am a woman"

If a man tells you women are deficient in intelligence, ask him how a fully

intelligent man could marry a half-brained woman?

If a man calls you *mutabarija*, take out your lipstick and make yourself beautiful

If a man tells you your place is at home, go out and find your place

Males only think they are men when they oppress women

#let_her_speak

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VITA

Education

A Doctorate of Education in Literacy (January 2017- present): Sam Houston State University, USA.

Master of Arts in Translation (2011): Higher Arab Institute of Translation, Algeria.

Bachelor of Arts in Translation (2008): University of Batna, Algeria.

Work Experience

Educational Leadership, Sam Houston State University, USA: June 2017- Present

Doctoral Research Assistant

The Academic Success Center, Sam Houston State University, USA: February 2017, May 2017

Writing Advisor

Guangdong Peizheng College, Guangzhou, China: August 2015, December 2016

Instructor:

- Oral English
- Discourse analysis for translation purposes

University of Central Florida, USA: August 2012, May 2013

Fulbright Foreign Language Teaching Assistant

Agti Translation Firm, Algeria: January 2012, May 2012

Assistant Translator

Batna University, Algeria: September 2010, March 2011:

Adjunct Professor:

- English/Arabic translation
- Arabic/English translation

Presentations

Braktia, B. (February 2020). Information and Communication Technology and Women Empowerment: Algerian Women in the 2019 Popular Movement. Paper presented at Southwest Educational Research Association Conference, Arlington, TX.

Braktia, B, Montenegro, M.A., Haas, L. (February 2020). Establishing Reliability and Validity of an Instrument to Measure Digital Literacy Practices and Perceptions in

Higher Education. Paper presented at Southwest Educational Research Association Conference, Arlington, TX.

Braktia, B, Koptelov, A. (November 2019). International Online Exchange Program to Promote Cultural Responsiveness in Teaching. Paper presented at The 11th Asian Conference on Education, Tokyo, Japan.

Braktia, B., Montenegro, M.A., Belalia, F.D. (November 2019). The Role of Social Media in the 2019 Algerian Protests. Paper presented at the 42th Fulbright Association Conference, Washington DC, USA.

Braktia, B., Montenegro, M.A. (February 2019). The Role of Information and Communication Technologies Tools in a Women Empowerment Project in Costa Rica. Presented at Global Education Conference, Huntsville, Texas.

Braktia, B., Montenegro, M.A., Nasiri, S., Pimrawee, R. (February 2019). Empowering Culturally Diverse Students: Culturally Responsive Strategies. Presented at Global Education Conference, Huntsville, Texas.

Braktia, B., Montenegro, M.A., Nasiri, S., Pimrawee, R. (February2019). Teaching Students from Culturally Diverse Backgrounds: Pedagogical Implications and Strategies. Presented at TexTESOL IV Regional Conference, Houston, Texas.

Braktia, B., Montenegro, M.A., Haas, L (February 2019). An Analysis of Information and Communication Technology Adoption and the Impact on Reading and Mathematics Assessment Scores in 4th and 8th Grades: A National Study. Paper presented at Southwest Educational Research Association Conference, San Antonio, TX.

Braktia, B., Montenegro, M.A. (November 2018). Improving Women's Socio-Economic Status in Algeria and Costa Rica: Non-Formal Educational Workshops. Paper presented at the 41th Fulbright Association Conference, Puebla, Mexico.

Braktia, B. (October 2018). Peer-Review as Means to Improve Students' Translation Skills. Paper presented at The International Scientific Conference, Gomel, Belarus.

Nasiri, S., Montenegro, M.A. **Braktia, B.** (September 2018). Foreign Language Learning Anxiety: Strategies for Coping with it. Paper presented at GATESOL, Atlanta, GA, USA

Braktia, B., Montenegro, M.A. (March 2018). Students' Perceptions of Social Media as a Means to Improve their Language Skills. Paper presented at the Tenth International Conference on Mobile, Hybrid, and On-line Learning, Rome, Italy.

Braktia, B., Nasiri, S. (March 2018). ESL Pedagogies and Strategies: Focusing on Teaching North African and Middle Eastern (MENA) Students. Paper presented at the 2018 Universality of Global Education Conference, Huntsville, TX, USA.

Braktia, B. (June 2017). Grammar for Translation Purposes. Paper presented at the 4th International Conference on Modern Foreign Languages, Linguistics and Literature. Preston, UK.

Braktia, B. (November 2015). Strategies in Cognitive Approaches to Translating Challenging Texts. Paper presented at the CSTIC 2nd International Conference on Cognitive Research on Translation and Interpreting, Macau.

Presentations and Workshops, Invited

Braktia, B. (March 2020). Working with Disempowered Women. Presented at International Women's Day at OWNN IT the Woodlands, The Woodlands, TX.

Braktia, B. (March 2019). Adopting Project-Based Learning in Teaching English as a Foreign Language. Workshops delivered to K-12 English teachers in multiple cities in Guanacaste in a collaboration with the Costa Rican Ministry of Education, Costa Rica.

Braktia, B. (December 2018). Implementing Information and Communications Technologies in Non-Profit Organizations. Workshop delivered at The Association for Future Development, Batna, Algeria.

Braktia, B. (June 2013). Being an Arabic Teaching Assistant Abroad: Tips and Advice. Presented at the Fulbright Language Teaching Assistant Pre-Departure Orientation, U.S. Embassy, Algiers, Algeria.

Braktia, B. (March 2013). The Role of the African French Colonies in WWII: Discussing the Movie "Days of Glory." Presented at The Middle Eastern North African Film Series at the University of Central Florida, Orlando, FL.

Braktia, B. (January 2013). Applying for Study Abroad Programs: Tips and Advice. Presented at Global Scholarship Forum at the University of Central Florida, Orlando, FL.

Braktia, B. (October 2012). Women Activism in Algeria. Presented at the Women and Leadership Forum, Reaching out to Touch the World, featuring Alison Thompson, University of Central Florida, Orlando, FL.

<u>Grants</u>

Co-wrote a proposal titled "Empowering Costa Rican Women During Times of Crisis: Creating Income-Generating Opportunities to Support Women from Low-Income Communities in Liberia, Guanacaste, Costa Rica." Submitted in July 2020 to U.S Embassy in Costa Rica (Amount: $16923.6, status: Unsuccessful).

Co-wrote a proposal titled "Project-Based Learning for Women Empowerment in Mali." Submitted in May 2020 to U.S Embassy in Mali (Amount: $9010, status: Unsuccessful).

Wrote a proposal for a Women's Book Club in Algeria. Submitted in October 2019 to the Center for International Education at Sam Houston State University (Amount: $200, status: Rewarded).

Wrote a proposal for Empowering Syrian Women Refugees through Entrepreneurship: The Use of Information and Communication Technology and Environmental Materials. Submitted July 2019 to the Open Meadows Foundation (Amount: $2000, status: Unsuccessful).

Co-wrote a proposal titled "The Use of Information Communication Technology to Empower Disadvantaged Socioeconomic Women in Rural Algeria." Submitted in April 2019 to the U.S Embassy in Algeria (Amount: $7265, status: Rewarded).

Co-wrote a proposal titled The Use of Information Communication Technology to Empower Disadvantaged Socioeconomic Women in Rural Algeria. Submitted in April 2019 to Arab Council for Social Sciences (Amount: $5000, status: Unsuccessful).

Publications

Braktia, B. (2020). Preservice Teachers' Cultural Responsiveness in Education: Students from the United States, Russia and Algeria. *Journal of Universality of Global Education Issues, (6)*5, 1-18.

Montenegro Sanchez, A.M., Koptelov, A.V., & **Braktia, B**. (2020). Modern Pedagogical Technologies as a Way of Improving Quality of Teaching a Foreign Language in the Context of University Students' Education. (pp. 210-237). The Pushkin State Russian Language Institute, Moscow, Russia

Braktia, B. (2017). Review of *Tiered Fluency Instruction: Supporting Diverse Learners in Grades 2-5*, by Chase Young and Timothy Rasinski, *READ, (3)*5, 60-61.

Awards

August 2020. Scholarship for Excellence in Service. Received from the School of Teaching and Learning, Sam Houston State University, Texas, USA.

June 2019. Scholarship for Excellence in Research. Received from the School of Teaching and Learning, Sam Houston State University, Texas, USA.

June 2016. Outstanding Contribution to Peizheng College. Received from Guangdong Peizheng College, Guangzhou, China.

Projects

Online ESL Program for Women Refugees and Immigrants (USA):
August 2020- Present
Program Director
Women's Book Club: Addressing the Importance of Education for Women's Empowerment (Algeria): January 2020- March 2020
Co-project Leader
The Use of Information Communication Technology to Empower Disadvantaged Socioeconomic Women in Algeria (Algeria): July 2019- March 2020
Project Leader
The Costa Rica Initiative with the Ministry of Education (Costa Rica): March 2019- May 2019

Trainer

Online Exchange Program to Promote Cultural Responsiveness (USA, Russia, and Algeria): January 2018- May 2018

Project Leader

Breaking Cultural, Geographical and Linguistic Barriers: Women Empowerment Projects in Costa Rica (Costa Rica): May 2018- December 2019

Co-project Leader

Community Engagement through Translation (China): February 2016- June 2016

Project Leader

Community Service

May 2018: Take a Book, Read a Book: Encouraging Reading Among Children. Cinco de Mayo Celebrations, Huntsville, TX.

September 2018- January 2019: ESL tutor at Huntsville Public Library.

March 2013: Faculty advisor with the Alternative Spring Break Program on the Hunger & Homelessness Trip to Atlanta, GA, USA.

November 2012, May 2013: A volunteer in Monitors in Violence Prevention Program, University of Central Florida, Orlando, FL.

November 2012, May 2013: A member of the Committee on Restoring Human Wellness at UCF (main focus: Human trafficking), University of Central Florida, Orlando, FL.

August 2012: A volunteer at UN Online Volunteering:

- Comité pour le Développement du Volontariat au Tchad: Translator.
- UNDP Geneva: Translator, editor, and researcher.

Professional Development

May 2020: Virtual Engagement Workshops. Sam Houston State University, Huntsville, TX.

February 2020: Efficiency with Style: Revising Your Manuscript at the Macro & Micro Levels. Sam Houston State University, Huntsville, TX.

January 2020: Planning & Writing Successful Grant Proposals Workshop. Sam Houston State University, Huntsville, TX.

September 2018: Hunks, Chunks and Bites: How to Get your Writing Projects Planned so you Can Get them Completed. Sam Houston State University, Huntsville, TX.

<u>Languages</u>

Arabic (mother tongue), French (fluent), and English (fluent).