

**Debate on Federalism in Libya:  
A Test of Spiral of Silence among TV Viewers and  
Facebook Users**

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Submitted to the  
Institute of Graduate Studies and Research  
in partial fulfillment of the requirements for the degree of

Master of Arts  
in  
Communication and Media Studies

Eastern Mediterranean University  
January 2017  
Gazimağusa, North Cyprus

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## **ABSTRACT**

This research applies the basic tenets of the theory of spiral of silence assumptions on the particular case of the current debate in Libya about the adoption of Federal system of governing as an administration system of the state. Throughout the work of this study, spiral of silence theory main topics is tested such as climate of opinion, which is examined to know how it could be perceived by individuals in this particular case, also the concept of fear of isolation, the role played by the references groups and how they influence the individual's willingness to speak out his opinion. For the present study quantitative research methodology was favored. Data has been collected through questionnaire which has been conducted among 100 participants in order to find answers to the research questions and assumptions. Responses of the participants and the collected data are analyzed using statistical software to obtain accurate statistical results. Findings show a significant role of territorial affiliation, media outlets and reference groups in determining the individual's opinion about the current federalism debate in Libya, in addition to a considerable influence of the previously mentioned factors on the individuals' willingness to speak out their personal opinions comfortably.

**Keywords:** Spiral of Silence, Federalism, Cyrenaica, Media Effects.

## ÖZ

Bu araştırma, spiral sessizlik teorisi ile Libya genelindeki bireylerin varsayımlarının ülkedeki yönetim sisteminin Federal sistem olması hakkındaki mevcut tartışması üzerine yapılmıştır. Bu araştırma esnasında, spiral sessizlik teorisi altında fikir iklimi, yani bireylerin bu durumdaki görüşlerini inceleme teorisi, ayrıca izole olma korkusu, referans gruplarının oynadığı rol ve bu partilerin bireylerin fikrini söyleme üzerinde olduğu etkilerine bakmaktadır. Mevcut araştırma nitelik teorisini uygulamayı seçmiştir. Veriler, 100 katılımcının anket çalışmasında yer alarak araştırmaya cevap ve görüş bildirerek toplanmıştır. Doğru statistiki bilgi edinebilmek için anket sonuçları bilgisayar ortamında analiz edilmişlerdir. Sonuçlar, bireylerin Libya'daki federalizm hakkındaki görüş ve fikirlerinin sınırsal bağlantılar, medyada çıkan haberler ve referans gruplarının olduğunu göstermiştir. Bu faktörler Libya halkının görüşlerini belirtmelerinde etken olduğunu göstermiştir.

**Anahtar Kelimeler:** Spiral Sessizlik, Federalizm, Sirenaika, Media Etkenleri

## **ACKNOWLEDGMENT**

First of all, I would like to express my love and gratitude to my wife for her supporting in this experience of my life.

My deepest appreciation to my supervisor Assist. Prof. Dr. Aysu Arsoy for the guidance throughout the working process of my thesis.

In addition, I would like thank Asst. Prof. Dr. Fırat Tüzünkan for his invaluable help and support, and my special thanks to Assoc. Prof. Dr. Metin Ersoy.

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# **Chapter 1**

## **INTRODUCTION**

This chapter aims to introduce the background of the inquiries, as well as establishing the major aims and objectives of the research. Besides, sub-sections of this chapter present the definition of main research assumptions and questions together with the layout of study and its scope and limitations.

### **1.1 Background of Study**

In general terms, the current research focuses on examination of new and mainstream media effect on climate of opinion in Libya regarding the topic of federalism. In this respect, spiral of silence theory is selected as a mean of examining a particular case of federalism debate in Libya, as it offers arguments and assumptions on the subject of public opinion, the process in which individuals assess the climate of opinion and their willingness to voice opinions or keep silent accordingly. The theory puts emphasis on a people's willingness to voice out their views on subject reliant on whether they think their opinion is the majority or the minority viewpoint, which is decided through what a person think is the climate of opinion (Noelle-Neumann, 1974). In public dialogues, especially those involving politics and morality, people prefer to have an idea about the consequences of voicing particular visions before they speak it out, therefore, they detect the surrounding public opinion then shape their own views according to it (Neuwirth, & Frederick, 2004). Thus, people employ media outlets and ideas circulating in the social circles around them to perceive which opinions are socially accepted in public dialogues and which are not.

Therefore, in order to obtain more comprehensive results, this research focuses on the effects of both: the mainstream media, such as television, and new media, such as social network (specifically Facebook) and their influence on climate of opinions. In fact, regarding a particular case of Libya, among a variety of factors, rapidly growing availability and utilization of social media, along with traditional sources like television, has had a significant impact on political situation (Hochheimer and Al-Emad, 2013). According to Harb (2011), the use of social media has greatly aided in discovering individuals' inner confidence in finding the voice of their own, leading to a gathering of a collective power to stand against dictatorship and authoritarian regimes.

Nevertheless, the topic of federalism debate in Libya, which emerged in public after the fall of Gaddafi regime in 2011 (Bassiouni, 2013), is alike to any public dialogue needs to be understood from one aspect or another. In this regard, this study intends to focus on applying the previous arguments and assumptions of the spiral of silence theory on the research sample responses to achieve a better understanding of the effect of territorial affiliation, media outlets and reference groups on the individual's opinion about the current federalism debate in Libya.

## **1.2 Purpose of Study**

The main aim of this study is to examine the effect of mainstream and new media on the climate of opinion regarding the issue of federalism in Libya. Subsequently, the spiral of silence theory and its basic tenets are selected as a means of research on the particular case of the current debate in Libya about the adoption of Federal system of governing as an administration system of the state.

Throughout the course of this study, main topics of the spiral of silence theory are tested, which include the climate of opinion and the concept of fear of isolation. Respectively, the climate of opinion is examined in terms of individuals' perception of federalism in Libya, while the concept of fear of isolation is studied in relation to the role played by the references groups and how they influence the individual's willingness to speak out.

As this research aims to examine the effects of media influence in assessing the climate of opinion, the respondents are supposed to use Television or Facebook as their main source of news and communication (Eljarh, 2014). Therefore, in this study the role of these particular media outlets in influencing opinion on Libya becoming a federalist state has been measured.

Regarding media effect, it is important to stress that Facebook as new media will be examined as one of the major influential sources, when it comes to formation of climate of opinion. Thus, the findings of this research can contribute to the answer of which of the media-mainstream or new-has a greater impact, as well as aiding in better understanding of whether the distinctive characteristics of computer-mediated communication dialogue can have an impact on fear of isolation and the perceptions of opinions.

### **1.3 Research Questions**

As mentioned earlier,, the major goal of this study is to utilize the basic tenets of spiral of silence theory regarding media effect on climate of opinions in case of ongoing debate in Libya to adopt Federal system of governing as an administration system for the state. Thus, this study focuses on two major concepts derived from the

theory of spiral of silence, which are climate of opinion and the fear of isolation, explained in previous sections of this chapter.

Along these lines, the main arguments of spiral of silence mentioned above will be compared with the responses of the study sample, so that the following queries could be answered:

1. What is the role of territorial affiliation in determining an individual's opinion on the federalism debate?
2. What is the role of the media outlet followed by the individual to determine his opinion about the federalism debate?
3. How do territorial affiliation, media exposure and the social circle (reference group) influence the individuals' willingness to express their opinion on the federalism debate?

In order to fulfill the purpose of the study and answer the research questions, the following hypotheses are assumed:

H1a: Heavy TV viewers will have more unfavorable opinion of Federalism than Heavy Facebook users.

H1b: Pro-federalism who are heavy TV viewers are less likely to voice their opinion than pro-federalism who are heavy Facebook users.

H1c: Anti-federalism who are heavy Facebook users are less likely to voice their opinion than Anti-federalism who are heavy TV viewers.

H2a: People from Cyrenaica region will have more favorable opinion of Federalism than people from outside Cyrenaica region.

H2b: Heavy TV viewers from outside Cyrenaica region will have a more unfavorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya.

H2c: Heavy Facebook users from Cyrenaica will have a more favorable opinion of Federalism than Heavy Facebook users from outside Cyrenaica region.

H2d: Heavy Facebook users from outside Cyrenaica region will have less unfavorable opinion of Federalism than Heavy TV viewers from the outside Cyrenaica region.

H2f: Heavy Facebook users from Cyrenaica region will have a more favorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya.

H3a: Highest levels of spiral of silence will be recorded among:

1. Pro-federalism who are heavy TV viewers with a majority circle of friends from outside Cyrenaica region.
2. Anti-federalism who are heavy Facebook users, viewers with majority circle of friends from Cyrenaica region.

H3b: Lowest levels of the spiral of silence will be recorded among:

1. Pro-federalism who are heavy Facebook users from Cyrenaica region with a majority circle of friends from Cyrenaica region.

2. Anti-federalism who are heavy TV viewers from the outside Cyrenaica region with majority circle of friends from outside Cyrenaica region.

In addition, for the purpose of this research it is essential to define criteria in categorizing TV viewers and Facebook viewers, ranging from light to heavy ones in accordance with number of hours, spent interacting with either of the mentioned media. In this respect, previously conducted study by Bryant and Zillmann (2002) identified the number of hours that classify individuals into light (1 hour or less daily), medium (2 or 3 hours daily) or heavy TV viewers (4 or more hours daily). Noteworthy, however, Bryant and Zillmann (2002) also state that "Because these measures of amount of viewing are assumed to provide relative, not absolute, indicators, the determination of what constitutes "light," "medium," and "heavy" viewing is made on a sample-by-sample basis, using as close to an even three-way split of hours of daily television viewing as possible. What is important is that there "should" be significant relative differences in viewing levels, not the actual or the specific amount of viewing" (Bryant and Zillmann, 2002, p.50). Therefore, although Bryant and Zillmann (2002) classification is taken as a basic guideline of the current research, this study also tends to distinguish heavy TV viewers (HTV) and heavy Facebook users (HFU) in accordance with the respondents' responses on the amount of time they interact with either of the media.

#### **1.4 Importance of Study**

Due to the continued upheaval, displacement, violence and conflict after the 2011 uprising, this is a unique study since it is a pioneer in addressing this controversial issue that beholds the future of state-building and the unity of Libya as one nation. Consequently, findings from this study are highly significant to understand the



political climate and how the climate of opinion is assessed in Libya after Gaddafi's era. Furthermore, new media, such as Facebook, which was used scarcely in the Gadhafi era (Bassiouni, 2013) will be analyzed as one of the most influential sources to form the climate of opinion and the findings of this study could give an answer which is the more influential Facebook or TV. It is hoped that a better understanding of current media could be acquired in regards to whether the distinctive characteristics of computer-mediated communication dialogue can have an impact on fear of isolation and the perceptions of opinions.

The internet can be perceived to be a platform that will allow people to speak out their own opinions, whether they are of majority or minority. However, one may argue that the increased use and dependence on social networks are so strong that one may be more inclined to conform to the public opinion in the fear of losing popularity, friends and even abuse on an alarmingly large scale and at an alarmingly fast speed.

### **1.5 Limitation of Study**

A current and recent issue such as this comes with some important risks. First of all, the country is still recovering from the aftermath of war and violence, and protests are a regular issue. Consequently, collecting the data first hand may pose some problems such as access to the country. There may be security challenges such as armed groups closing off the airports, roads and even state institutions. Therefore, choosing the research sample was among Libyans residing in North Cyprus and only one hundred respondents from all regions of Libya were participated in study. Undoubtedly, an enlarged data set would additionally improve the total generalizability of the results and findings of this study.

Moreover, another limitation to current research is the insufficiency of qualitative data, since it was set out to be conducted as a quantitative study. Nevertheless, during data gathering, participants spoke about their experiences and gave reasons for their responses on the survey questions and their attitude towards the federalism debate in Libya, as well as their way of perceiving the climate of opinion whether through the various media outlets they follow, or through their social circle of friends or family. Therefore, various aspects of the whole issue were not exhibited, in addition to much significant information that could be very important in achieving the purpose of this study and add more reliability to its results. Hence, in forthcoming spiral of silence test or research, we will ensure the inclusion of a qualitative element. Furthermore, for the debate about federalism to being a current issue, there is a lack of literature and studies relating to it.

## **1.6 Spiral of Silence Theory**

This study is based on theory of Spiral of Silence when testing the general opinion in relation to media effect in forming the Climate of Opinion. The theory emphasizes on people's willingness to speak out on a subject reliant on whether they think their opinion is the majority or the minority viewpoint, which is decided through what a person think is the climate of opinion (Noelle-Neumann, 1974). It refers to the tendency of people to remain silent when people think their opinions are opposition to majority view on a subject. The theory assumes that majority of individuals feel afraid of isolation when the group or public realize that the individual has a different opinion from the status quo, hence named as the Fear of Isolation. Also, people detect the surrounding public opinion then shape their own views according to it (Neuwirth, & Frederick, 2004). Furthermore, individuals may fear isolation, in terms of where voicing an opinion may lead to a negative consequence such as loss of a job

or status; therefore, they attempt to distinguish what ideas one can speak out without being isolated. Moreover, an individual tends to express a viewpoint when it's consistent with the opinion of majority and vice versa (Noelle-Neumann, 2006). The researchers in this study assumed there are mixed opinions about the implementation of a federalist state in Libya. These opinions and their likelihood to be voiced depend on a number of factors such as origin, reference groups, location and media (TV and Facebook). This study will focus on determining the role of the previous factors in forming the Climate of Opinion and on the individuals' willingness to speak out their opinions.

## **Chapter 2**

### **LITERATURE REVIEW**

#### **2.1 The Spiral of Silence**

Elisabeth Noelle-Neumann (1974), was a German professor in University of Mainz, who established theory of 'spiral of silence' to explain the growth and effect of public opinion. The theory was an inspirational piece of research theories on the public opinion's topic (Kennamer, 1990). It can be defined as the increasing pressure to conceal one's view when they believe they are in the minority. It is a theory which depends on the psychological basics of communication, awareness and confidence (Taylor, 1982). Noelle- Neumann (1974), confirms on the significance of this phenomenon to analyze the advancement of public opinion when she argued that the relationship which connect personal principles and the results of observed social surroundings is a key feature of the process in configuration of one's opinion.

Established in 1974, the theory investigated the notion of identifying what makes some people speak out in forums and public dialogues while on the other hand some others keep on being silent. The theory claims that when some people perceive their opinion to be unpopular with the rest of public, they will develop a state of silence (Neil, 2009). The individual may experience the process of spiral of silence after perceiving that his opinion is not based on solid ground; and the possibility for him to keep silent and be less confident will be increased more and more whenever this appears to him (Noelle-Neumann, 1974). How a person perceives his social

surroundings, is the cause of the lack of confidence in himself and fueling the uncertainty (Neil, 2009). Scheufele (2007) argues that the process of spiral of silence will be obvious over a period of time. During long periods, people in minorities are going to lose confidence for opinion to be voiced and gradually fall in silent at a slow rate while the majority slowly begins to rise. According to Scheufele, the majority viewpoint eventually evolves into a social norm. He also claims that people with the minority view point will be more silent the more people with the majority view point are perceptible and popular. However, the cycle of the spiral of silence supposed to works only for issues contain ethical elements and precious values Scheufele (2007).

## **2.2 Public Opinion**

The statement to the spiral of silence theory claims that the perception of the individual about the prevalence of the public opinion motivates his willingness in expressing controversial attitudes (Taylor, 1982). Also according to the previous source, Public opinion is the summation of the personal opinions which people can speak them out. It also could be defined as trends which the individual can speak out without the fear of being isolated (Noelle-Neumann, 1993). Noelle-Neumann (1991) imagine that public opinion works like a social control instrument which aimed at promoting social integration and achieve an adequate level of agreement before decisions are made and actions be taking, Noelle-Neumann (1991) emphasizes the power of public opinion, and describes the public opinion to be a concrete power which keeps individuals in tune with the majority opinion. According to Noelle-Neumann (1993), the 17th Century philosopher John Locke, claims that the opinion's law is a law people seriously obey (Noelle-Neumann 1993).

Noelle-Neumann (1993) claims that television significantly increases the speed of the spiral, however in this current study, in order to understand the influence of mass media, whether traditional television or modern social networking sites (SNS) such as Facebook, we must first understand how people form the “climate of opinion”.

### **2.3 The Climate of Opinion**

According to (Taylor, 1982), claimed that the action of self-expression, influence the surrounding environment of opinion, modifying other people's perceptions, then finally, affect their tendency to voice out their personal opinions. The climate of opinion based on whose voices their opinion and who stay silent (Noelle-Neumann, 1984). The proportion of the public who show support to a particular view point influences the perception of the public about that view point (Spencer and Croucher, 2008). Lasorsa (1991) discovered that a person's political interest and self-efficacy play important roles in constructing a person's willingness to speak out against the climate of opinion. The more passionate and involved someone feels about an issue and the more power they feel to create change, the more likely they would be to voice an opinion. Taylor (1982) states that because individuals observe their environment and act accordingly, opinions with visible and apparent support are believed to be more genuine than they really are. Individuals' propensity to voice out their personal view points vagaries relying on perceptions. Consequently, this perceptual loop has the ability to change the public opinion (Taylor, 1982).

### **2.4 Quasi-Statistical**

Noelle-Neumann (1993) supports the notion that humans have a quasi-statistical organ, could be considered as the sixth sense which is compiled of one's knowledge about what society's feelings and thinking in general. She states that whenever occurs a change in the climate with or against an idea, a party, or a public figure, it

looks like being sensed far and wide at nearly the same period by the entire population (Noelle-Neumann, 1993). In analysing the climate of opinion, Noelle-Neumann (1993) identifies two factors which contribute; when shaping their thoughts, firstly, one would focus on the present climate and what most people believe and secondly, on the future predicting if more people will conform to this view or less. Later in Scheufele (2007), states that the individual's view of the public opinion, rather than the real public opinion is what makes individuals voice their opinion and that what forms individual's willingness to voice out their viewpoints is the perception of opinion apportionment not the actual climate of opinion.

## **2.5 Testing the Spiral of Silence**

A train/plane test devised by Noelle-Neumann in 1984, to find out if people tend to speak out to support of their opinions. A survey was carried given to participants to imagine that another passenger on a train attempted to start a conversation on a topic. She gave an example of an individual having a five hours trip on a plane or a train, and heard someone talking about controversial issues, would he possibly discuss those issues with that person or would he prefer to keep silent (Noelle-Neumann, 1984).

The willingness to involve in a debate with the other traveler was used as a measure to voicing view points and reactions of this inquiry were cross-examined with the individual's observation to the climate of opinion of the exact issue (Noelle-Neumann, 1977). This original test was later modified by varying the means of transportation (so on, Lasorsa, 1991; Salmon & Neuwirth, 1990). Alternatively, the tendency to involve in a debate in a collective discussion at some type of social meeting has also been analysed in measuring the expression of opinion (so on,

Willnat et al., 2002; Neuwirth, 2000). More recently, individuals have been tested while being in a waiting room (Pinter & Petric, 2002). Some researchers have further tested by engaging participants in a hypothetical discussion without specifically specifying the topic (Salwen, Lin, & Matera, 1994).

Expressing an opinion rather than engaging in a conversation has also been used to test the willingness to speak out. In other studies, participants were required to socialize in a group at a party or other social gathering (Moy, Domke, & Stamm, 2001; Scheufele, 1999; Scheufele et al., 2001), be present at a meeting (Gonzenbach & Stevenson, 1994), conversing with a reporter (Salmon & Neuwirth, 1990), participating on a radio talk show (Perry & Gonzenbach, 2000). However, Hayes (2007) points out that there is a great difference between voicing an opinion and entering a conversation as he states that there are different ways in which to uphold a conversation without expressing personal opinion. Therefore, it would seem more beneficial if the participants were asked directly if and to what extent they were willing to disclose their personal opinion instead of having a conversation. (Hayes, 2007)

Noelle-Neumann (1991) claims that it is not without effort that one must choose the most popular opinions. She says it requires tremendous amount of energy to determine which the most preferred idea is and which ideas are declining in preference. However, she believes that this is energy well spent when comparing the risk of isolation with an opinion which is no longer favored (Noelle-Neumann, 1977). Noelle-Neumann (1993) states that people are far more willing to observe



what is happening around them, rather than risk the positive approval of others leading to rejection and isolation and even being despised (Noelle-Neumann, 1993).

## **2.6 Fear of Isolation**

Elihu Katz and Tamas Szecsko, (1981) had previously highlighted that people live in constant anxiety for fear of becoming out casted from society and therefore carefully observe what is happening around them to see which opinions are high and which are low. An individual's decision of whether to voice an opinion or not depends on the fear of becoming isolated in society Petric & Pinter, (2002), Scheufele, Shahanan, & Lee, (2001). Noelle-Neuman (1984) claims that the fear of isolation is the engine that drives the spiral of silence and our genetic social make up is the cause of our fear of being separated and isolated from society as people have a desire to be respected and liked by their peers (Noelle-Neumann, 1984). Noelle-Neuman (1984) bases this notion on the foundation work of research psychologist Solomon Asch (1951), who discovered that people will dismiss the information from their senses and conform to the public opinion feeling anxiety under group pressure (Asch, 1951). Asch (1951), performed an experiment, where participants were asked to match lines after associates had purposely given an incorrect answer (Asch, 1951). The results showed that 74% of the incorrect responses made by subjects were the same response as the majority. Noelle-Neumann (1977) emphasizes that people are fully aware that their views are not in favour with the public opinion, they recognise that they are opposite to the majority and therefore choose not to speak out for fear of being isolated. Noelle-Neumann (1977) states that people who are aware that their own personal belief is popular and is used by people, will confidently voice this belief in public. However, people who start to notice that their own opinions are losing popularity will be more reserved.

Noelle-Neumann (1974) also highlights that the reason for conformity is to gain popularity with the winners rather than avoiding isolation (Noelle-Neumann, 1974). For example, after a political election, there would be a higher percentage of people who claim that they voted for the winning party, than the actual counted votes (Griffin, 2011). We can relate to the current study by mentioning that the influence of social networking sites, such as Facebook, which is a platform for pro-federalists to voice their opinions, may give Libyans the sense that federalism will succeed. In this case, people are more likely to form a climate of opinion based on the majority opinion and the winning team. At the same time, Libyans who mostly watch television may be heavily influenced into anti-federalist and are more likely to voice opinions of anti-federalism as they would believe it is the most popular and winning idea. Noelle-Neumann (1974) does not believe that after an election people would just switch to the winning team, regardless of their opinion. She rather emphasizes that opinions which are not a person's true feelings are just a defense mechanism to protect that person from being socially outcast. Human beings have a strong need and sense of belonging, therefore the climate of opinion is a necessity to be assessed constantly (Noelle-Neumann, 1977).

Figure (1) illustrates how minority moves down the spiral of silence. The small black ball exemplifies individuals who feel a slight discrepancy between their station and the dominant public opinion. Up to this point they feel comfortable expressing their views in public. But then the nagging fear of isolation works as the gravity to pull them down and convinces them to be more cautious (Griffin & McClish, 2011).

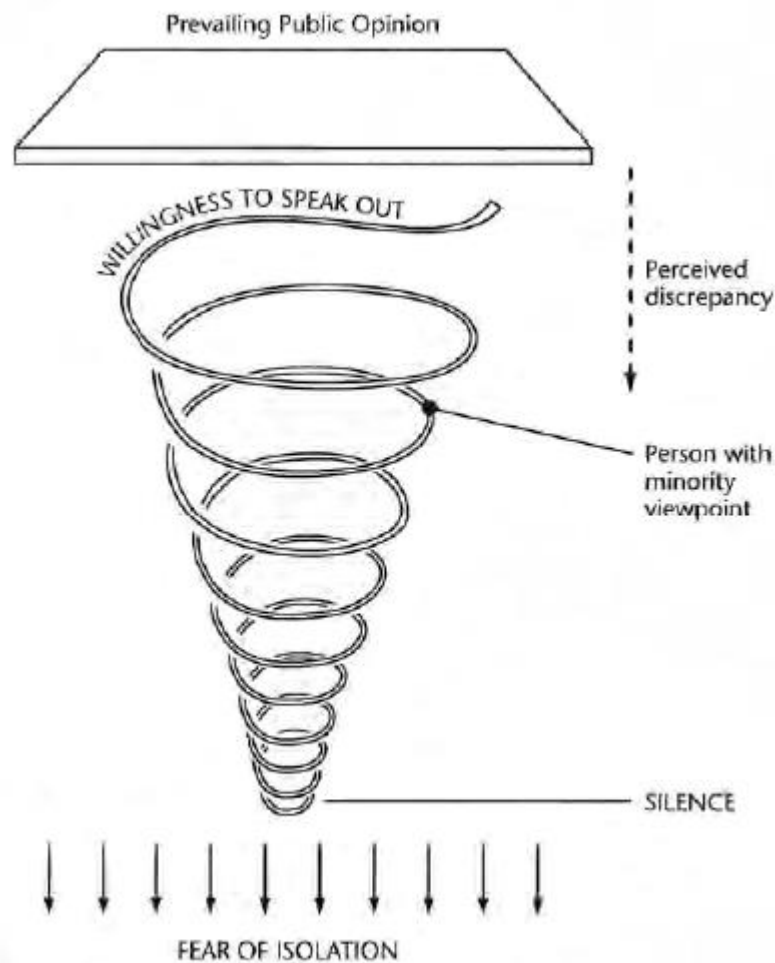


Figure 1: “The Downward Spiral of Silence” (Griffin & McClish, 2011, p378).

## 2.7 Caught in a Spiral

The willingness of some people to voice their opinion while others remain silent, is described as the start of a spiraling process, which determines an opinion as correct or incorrect (Noelle-Neumann, 1977).

Griffin (2011) describes the ordeal of being trapped in the spiral of silence due to factors such as the natural human nature to agree with the public opinion, fear of being isolated and people being reluctant to express views which coincide with the minority (Griffin, 2011). Noelle-Neumann (1981) describes the acceleration of the spiral of silence, people live in a constant fear of isolation and therefore carefully observe their surroundings. As the phenomenon unravels further, the opinion of the

perceived majority will eventually become a social norm. If they feel that their opinions are the dominant ones, they speak out in public comfortably. However, if they feel that their views are losing support, they become afraid and remain silent. People are influenced by the group who express themselves confidently in public which makes them be perceived as strong and the dominant opinion. However, the other group which remain silent are perceived to be weaker and less dominant opinion (Noelle-Neumann, 1981). Noelle-Neumann (1981) claims that this persuades others to voice their beliefs themselves or, on the other hand, remain silent and a spiral process starts off. The greater the difference between the dominant public opinion and a person's own opinion, the more they feel the pressure to conform to the demands of the society (Griffin, 2011). Consequences of remaining silent put the individual in a difficult position. Firstly, choosing to conceal opinions which are unpopular contribute to the downward spiral of the public opinion, even if those unpopular opinions are quite popular in the general public. Therefore, concealing these views contribute to supporting the opposite point of view and spiraling into a strong public opinion of the favored opinion (Hayes, 2007). Another consequence may be that choosing to conceal an unpopular belief may be detrimental to an individuals' harmony, however the view is more likely to be concealed in order to create social harmony (Hayes, 2007).

## **2.8 Hard Core and Avant-garde**

Noelle-Neumann (1977) points out that there are two kinds of people who will not remain silent and will voice their opinion, regardless of being the minority. These two different types of individuals are known as 'hard core' and 'avant-garde' (Noelle-Neumann 1977). The hard core are people who have already been rejected in society because of the thoughts they believe in or their behaviors and do not afraid of losing

anything if they speak out their personal opinions (Griffin, 2011). The hard core consider social isolation as the price that must be paid for publicly supporting a minority viewpoint (Noelle-Neumann, 1993). The Avant-garde, on the other hand, are elites who holds the minority view point and speak out since they believe they can predict what will happen in the future (Griffin, 2011).

## **2.9 Similar Studies**

Spencer and Croucher (2008) tested the spiral of silence theory with two nationalities. This study analyses the public view of the Basque separatist group, ETA, in Spain and France. The Basque people belong to North of Spain and South of France. Similar to the people of Cyrenaica in the east who were marginalized for many years (Sadiki, 2012), the Basque also had a history of struggling for independence. They struggled to falsify a nationalist ethnic language movement and the confidence to speak out for or against that movement depended on ethnic and national identity (Spencer, & Croucher, 2008). Similar to Cyrenaica being dominated by Tripoli, the Basque people have encountered hardships for years against the domination by the Spanish and French governments. Parallel to the marginalization of Cyrenaica (Sadiki, 2012), the Basques had never accepted belonging part of the state of Spain (Spencer, & Croucher, 2008). Furthermore, they have not been fully included in the procedure of building the nation (Edles, 1999). In 1898, Sabino de Arana established the Basque Nationalist Party, which was the dominating political party of the separatist movement. Later, younger and more more fundamental members begin to form the movement known later as (ETA) (Edles, 1999). In Spencer and Croucher's study (2008), participants were French and Spanish people who lived in the Basque regions and French and Spanish people who lived outside the Basque territories. Basque individuals from Spain and France were questioned

about their support of ETA. The cultural differences of the two different regions in which the ETA existed, was taken into careful consideration. The results reinforced the theory of the Spiral of Silence. Even though the belief of the violent group was hostile, there was a lack of outspoken opinions to dare to stop their actions. It was found that people were more likely to be out spoken about their opinions to individuals who are not Basque, signifying that they have a "fear of isolation" among the Basque community. Additionally, the Spanish participants were more likely to be silent and not voice their opinions because of their closeness to the violent acts. The study discovered a stronger spiral of silence effect where participants were nearer to the Basque area both geographically and with cultural familiarity (Spencer & Croucher, 2008).

## **2.10 The Influence of Mass Media & Pluralistic Ignorance**

Noelle-Neumann (1974) claims that mass media significantly influence the way in which an individual sees the social environment. She argues that mass media affects public opinion through cumulation, ubiquity and Consonance. Cumulation refers to the collection of certain themes or messages over a period of time. Ubiquity refers to the extensive presence of the mass media. Consonance refers to the cohesive picture of an issue that can develop which is shared by newspapers, magazines, television networks and other media (Noelle-Neumann, 1974). Griffin (2011) argued that the media is responsible for the silence of the minority, being a major input of data which contributes to the quasi-statistical hypothetical sixth sense (Griffin, 2011). Scheufele (2007) supports Elisabeth Noelle-Neumann (1974) in the argument that mass media is a vital instrument for the spiral of silence, naming it a “dual climate of opinion” (Scheufele, 2007, p.176). The dual climate of an opinion may occur when conflicting groups make various view points on one issue (Scheufele, 2007).

Scheufele (2007) points out that more many people media is the most popular source of information about new topics. He argues that before an individual forms an understanding or view about an issue, the media gives them this perspective and guides their opinion (Sceufele 2007). Noelle-Neumann (1973) defines the term 'plural ignorance' as peoples' mistaken idea that everyone thinks as they do and holds responsible the fact that both sides are not well presented (Noelle-Neumann, 1973).

Salwen, Lin, and Matera (1994) conducted a study in which respondents were surveyed in three differing communities regarding their willingness to express their opinions about the "Official English" language. The results found that perceived media opinion influenced their willingness to "speak out." People were more likely speak out when they perceived that national opinion (public and media) corresponded with their own opinions. We can relate to this in our study; Libyans who use the mass media source of television as their main platform to obtain news and communication assumed to be more surrounded by anti-federalist views, making them more confident that anti-federalism in the most popular idea, however when socialising in a café, face to face, this false sense of security may become apparent. Griffin (2011) argues that "opinions supported by the influential media are often overestimated" Noelle Neumann (1973) admitted that the power of media to change or support peoples' attitudes was limited to selective exposure. Whilst, newspapers and magazines, containing written words, enable a person to choose what to read or avoid, Noelle-Nuemann (1973) states that television is a different matter because influences of mass media increase in amount to the point in which selective perception is made challenging.

According to Griffin (2011) Noelle-Nuemann goes further to state that the media, especially television, tells us what to think as well as providing a permissible view of what everyone else is thinking (Griffin, 2011). Therefore it could be argued that those in power and the right connections can have an advantage in manipulating the quasi-statistical organ which is responsible for forming a person's opinion (Griffin, 2011). It is important to highlight that the Libyan government in Tripoli has the power and authority of most of the television channels (Sadiki, 2012). As the thought of federalism of the nation is a direct threat to Tripoli, as Cyrenaica own the natural resources, it is inevitable that television channels owned by Tripoli leaders guide the viewpoint of anti-federalism (Sadiki, 2012). Mass media can cause the majority to be perceived as the minority opinion and the power of television is emphasized as the responsibility of not just portraying the general opinion, but is also largely responsible for constructing it (Griffin, 2011).

## **2.11 Online Communication**

Social networking sites, such as Facebook, typically allow individuals to register, build up a profile with a biography and their chosen picture(s) to connect to other people in order to communicate or share resources and make comments (Thelwall, 2008). Blogs, which are web sites consists of number of posts in reverse sequential order of date, have found to be persuading in politics and the news (Wall, 2005). Coleman (2005) argues that blogs provide a platform for an increase in democracy present an opportunity for increased democracy. He goes further to say that blogging gives the public an opportunity to debate with each other. Blogspace can be thought of as a new virtual "public sphere" (Habermas, 1991) in which politics and other topics can be willingly debated. Nevertheless, it is not clear whether blogs mainly support a debate or mainly promote discussion with like-minded individuals



(Thompson, 2003). It can be claimed that news displayed in social networking sites are more widely used among the general public rather than individuals with a particular interest in news and hence are more widely accessible than specialist news sites (Thelwall, 2008).

## **2.12 Social Media in the Arab World**

More than fifty years ago, media in the Arab world would have only existed with strict political regimes and restrictions (Hochheimer & Al-Emad, 2013). All media was controlled by national governments and used as methods of propaganda to promote the government's political, cultural and economic ideas. These strong ideals instilled in to the citizens the fear of punishment if one was to go against the regime. By controlling media, it was difficult for people to express their own ideas in public, making it much less able for them "to cooperate and to engage in collective opposition actions" (Tufekci & Wilson, 2012, p.363). The Arab spring was initially ignited following a 26 year old Tunisian vegetable street vendor, Mohamed Bouazizi, who set himself on fire in an act of protest following a confrontation with authorities on the 17<sup>th</sup> December, 2010. Social media was used to distribute pictures and reports of the incident with the rest of the world, helping to break out of the media blackout that the government had put on the protests (Delany, 2011). Although television channels such as Al-Jazeera broadcasted the protests, protesters also communicated with each other through social media such as Facebook (Hochheimer & Al-Emad, 2013). There had been a lengthy period of built up tension and anger against the government amongst the citizens and the first time it was publicly displayed was through social media (Hochheimer & Al-Emad, 2013).

People from Tunisia and the rest of the Arab world used the Internet, Facebook, Twitter and other social media to create social networks and pages to express their concerns and to promote those protests to the rest of the world (Hochheimer & Al-Emad, 2013). Although television channels such as Al-Jazeera contributed knowledge to the public (Howard, 2010), the Internet and increased popularity of social media platforms such as Facebook and YouTube had the additional benefit of social connectivity (Khamis & Vaughn, 2011). Facebook users not only shared material translating it into different languages, they provided material in the form of status updates, photographs and videos and sent it to traditional media sources and journalists (Hochheimer & Al-Emad, 2013). Ray (2011) stated that whereas traditional media represented the government's political objectives, social media was the voice of most Egyptians because of their immediate responsiveness to events and people's needs. Khamis and Vaughn (2011) claimed that social media were merely powerful appliances and effective catalysts which were only operative because of the willingness of huge numbers of individuals to actually involve in and support peaceful social protest, occasionally at a huge personal cost. Social media users encouraged each other to speak out and to rise up against their authoritarian regimes (Hochheimer & Al-Emad, 2013). By using social media, people discovered their internal power and confidence to find their own voices, which helped them, grasp that power collectively to stand up to and overthrow their dictators and their authoritarian regimes (Harb, 2011).

In Libya, among many factors which have contributed to political changes such as the Arab Spring and the overthrow of Ghadafi has been the growing availability and use of social media, such as platforms like Facebook, Twitter so on, as well as the respected television network Al-Jazeera, with its headquarters in Doha, Qatar

(Hochheimer and Al-Emad, 2013). Their increased availability and access has allowed people to communicate with each other outside of government control (Hochheimer & Al-Emad, 2013). It can be argued that whereas face-to-face communication instigates feeds a spiral of silence, social media communication can generate what Hochheimer & Al-Emad have termed a 'Spiral of Voice'. They go on to say that the Arab Spring experienced an influx of action by the public and this action and growing sense of hope was made possible by the propagation of social media. The more material which people were exposed to and the more material they shared, increased their sense of popularity of their views and actions (Hochheimer & Al-Emad, 2013). Throughout the period of uncertainty and political and social upheaval during the Libyan war, many people have connected with each other in social networking sites such as Facebook and joined groups supporting or not supporting federalism.

### **2.13 Federalism**

Federal system of government is a kind of government which allows the sharing of power between the center and its component units. The system is known for the decentralization of power sharing between the center as represents by the federal government and the component units of the federation as represented by the regional or governments as in the case of United State of America and some other countries such as Brazil and Nigeria (Verney, 1995; Lijphart, 1979).

It can as well be referred to as federated sovereign state formed by establishment of a closely-knit, union of two or more smaller political communities, which, after forming union, are no longer sovereign (completely independent) but do retain a significant degree of autonomy (partial self-government) (Norris, 2005; Lijphart,

1979). There comes a distinction which exists between 'federalism' and federation' as first noted by King (1982) cited in *Federalism, Federal Political Systems, and Federations*, by Watts, (1998), according to King federalism is a normative and philosophical concept which explains the advocacy of federal principles, meanwhile federation can be seen as a descriptive term which referring to a particular type on institutional relationship. Some state practicing federalism do experience asymmetric because some states have more autonomy in Malaysia, Sarawak and Sabah. It needs to be known that federal system of government do come to being after an agreement between the members of separated states (Watts, 1998). In federal system of government, there exist collective efforts to address a common problems as well as strong will and determination for creation of nation state for an ethnicity spread over several states. Examples of federations in the world today include the United States of America, the Commonwealth of Australia, Canada, the Federal Republic of Germany, Austria, and Switzerland (Watts, 1998).

### **2.13.1 Advantages of Federalism**

The purpose of federalism as being experienced by many countries practicing the system is to allow for equal representations of governance and power sharing policy. Unlike other form of government like Unitary which does not allow for decentralization of power, only the head at the helms of affair dictates the means of production and distribution. No sharing of power, power is legislate from the top to the down. But in federalism system none is superior to other, both the units and are constitutionally equaled. Another major factor while some nations adopted federal system of government is that the system derives its power through the constitution.

In federal systems constitution is supreme and dictates the deeds of both central and the component units. The powers of the jurisdictions are delegated through the

provision of the constitution. All acts regarding the practices of those in power must be in tandem, consistence with the rules as spell out to them in the constitution (Watts, 1998).

The practice also gives right as stipulated in the constitution power to every unit to establish a supreme court. This keeps the deeds of those in power in check as well as serves as the last resort for the less privileged ones. It advocates and interprets law and cases (Goldsmith, 1997). The system also makes provision the two chambers of legislations, which is known as bicameralism. The lower chamber enshrines with national idea and represents the nation as a whole while the upper house represents federal idea and represents the units as such (Lijphart, 1985). In federal system of government, the fear of majority dominating the minority resources is eliminated. The minority feels the sense of belonging and they equally represented and the representatives do serve the interest of their people (Fossati, 2008).

### **2.13.2 Disadvantages of Federalism**

On the contrast, federalism does have its disadvantages which would make governments like Libyan government think carefully before adopting or going into it. In federal system there is usually a conflict of interest and power tussle between the federal and the subordinates units. In most cases, there is dispute of power supremacy between the central and the subordinate, state wants to exercise its residual right as against the exclusive power of the central (Mueller, 2006).

Another disadvantage is the fear of secession, since federalism is accompanied by the dangers of secession. The subordinate units can secede if they discovered they were being marginalized by those at the helms of affairs. In order not to allow this to occur, the government in power always tries to suppress any form of attitude that will

can create room for power decentralization (Norris, 2005). Like in the case of Nigeria, the subordinate units (Niger Delta) are clamoring for secession from the government if they were not allowed to manage their resources. This is the region that provides the most of country wealth, yet they feel marginalized and want to secede (Ikelegbe, 2001). Additionally, in federalism, the system is huge and expensive to manage. It cost more to ensure equal distribution and allocation of state resources in a federal government than in a unitary government (Mueller, 2006). Furthermore, there is higher level of corruption and decision making process in a federal system of government is always delayed. This is because for any decision to be passed it needs to pass through the chamber which is bicameral in nature. This slows down action and very expensive to manage. Unlike in a unitary government where the decision is make quicker and less expensive to manage. The resources is managed and distributed by the supreme leadership alone. It needs not to pass through any form of two chambers, only one chamber exists (Lijphart, 1979, 1985; Norris, 2005; Linder, 2002).

## **2.14 Debate about Federalism in Libya**

On 24 December 1951, Libya declared its independence as a federal state under the name of the United Kingdom of Libya, a constitutional and hereditary monarchy. However, later in 1963 there was an amendment on the constitution changed the state from a federal state to a unitary state which was against the wishes of the inhabitants in Cyrenaica (Bassiouni, 2013). On March 6, 2012 the Cyrenaica Transitional Council called a meeting with thousands of tribal, military and political members in Benghazi and demanded the establishment of a federal governing structure in Libya (Eljarh, 2014). Meanwhile, thousands of Libyans in Tripoli and Benghazi also took to the streets chanting “No, no to federalism,” and “Libya is one” (Gluck, 2012).

The reason for the demand in a federalist state in eastern Libya is based on fear of marginalization and domination by the majority in Tripolitania, these fears emphasize of a lack of trust between the people in eastern Libya and in western Libya (Eljarh, 2012). Those in favor of federalism are worried that those against it would continue the Qaddafi era's marginalization of Benghazi and the east, which was the root of the uprising. However, those against federalism fear the supporters want to divide and disintegrate the nation (Gluck, 2012). Statistics on how Libyans actually support Federalism are difficult to obtain. However, the International Foundation for Electoral Systems (IFES) released a report in 2013 on voters' opinions of the election process in Libya, it was discovered that Benghazi participants favored administrative federalism as their preferred system of governance for the future (Pack, J., & Cook, H., 2015).

With tensions building over oil revenues and inequality in eastern Libya, the country's debate on federalism is getting stronger. Most in the federalist movement seek greater regional autonomy, rather than complete separation from Libya (Proot, 2012). Jalu is one of the most under privileged areas in Libya, despite literally living on top of the invaluable oil reserves. Reservoirs in Jalu contain large oil reserves of 9 billion barrels (Hallett, 2002). Considering that 80% of the country's oil reserved is located in Cyrenaica, people in Cyrenaica demands for autonomy country seems like a fair and just request (Salih, 2014). Therefore, it is not any wonder that in other provinces have a real cause for concern over the unity and assets of the country. There is a far higher population in Tripolitania, who currently own the power and the traditional media, than Cyrenaica who are sitting on top of the country's valuable resources (Sadiki, 2012). The people of Cyrenaica who feel marginalized and

neglected under Col Gaddafi are more in favor of federalism, whereas people Tripolitania, who see it as a threat and disadvantage, heavily oppose the idea (Mezran, & Pickard, 2014). The state media in Libya, Television and Radio, are in the control of the central government in Tripoli, are biased and therefore portray a view against federalism (Mezran, & Pickard, 2014). Due to this, people who encourage federalism may be considered in the media as disloyal to their country. Traditional media can be argues to be biased against pro-federalism. Another powerful form of media is the computer based online social network Facebook which has been used as an alternative source of media for the Cyrenaicans who cannot express themselves in the traditional media to promote the concept of federalism ("Libya Facebook,"n.d.). Since the 2011 uprising, there has been an increasing number of TV stations, mostly against federalism (Pusztai, 2016). The interesting fact is that the increased use of Facebook has taken place after the 2011 uprising, with a remarkable increase of 86% of users opening new accounts (Stenger, 2012; Beaumont, 2011). More significantly, Facebook pages are supporting federalism ("Libya Facebook,"n.d.), because it seems to be the only method of communication for pro-federalism activists to promote their ideas.

## **2.15 Social Media and the Spiral of Silence**

It was initially believed to be the case that when applying the spiral of silence theory to online, computer mediated settings, anonymity would compensate for the fear of public humiliation which results from an unwillingness to express minority views. However this belief has been disproven in a number of studies (Mc Devitt, Kiouisis, & Wahl-Jorgensen, 2003; Stromer-Galley, 2002). Stromer-Galley (2002) argued that online communicative platforms, such as message boards, chat rooms and email can instigate argumentative political conversation due to a lack of non-verbal cues, which



leads to a lowered sense of social presence and a higher anonymity. McDevitt (2003) investigated whether the anonymity in computer-mediated communication aids a greater willingness for one to express their minority opinion online. It was found that those with minority views spoke up more than those with majority views, in a sensitive topic in a chat room. However a distinction was made between speaking up (contributing to a discussion) and speaking out (specifically voicing a minority opinion). It was found that those in the minority refused to express their opinion which suggests that the spiral of silence is present even in an online anonymous setting (McDevitt, et al., 2003). Hong and Park (2011) conducted a study looking at the expressions of online opinions by observing individuals discussions on a website which rates films. It was hypothesized that users would feel less obliged to express their majority views because of being anonymous online. However, the results were only partially supported. When individuals felt that there was a negative opinion climate, they were more likely to express their minority opinion by offering feedback. On the other hand, when individuals observed a positive climate of opinion, they were less likely to express their minority view by expressing negative feedback (Ho, 2008). Shirley Ho (2008) claims that the unwillingness to speak out is by a “dysfunctional social-psychological process” (Ho 2008, p. 190). She claims that one way in which this dysfunctional process can be overcome is by using computer-mediated tools.

Ho (2008) claims that an individual’s experience when making a face-to-face communication comprises facial and body languages and other influences to determine the intention of the second party in the dialogue. On the other hand, in computer mediated communication, the user possibly will distinguish a similar

response with an entirely different understanding due to the absence of those additional influences (Ho, 2008).

Gallupe, Bastianutti & Cooper (1991) proposed the effects of computer mediated communication on anonymity in minority groups, they found that when people were asked to speak out there opinions about particular controversial issues, they were more willing to do so in in the CMC (computer mediated communication) setting than in the face to face setting (Gallupe, Bastianutti & Cooper, 1991).

While it could be argued that Noelle-Neumann's (1974) proposition that traditional authoritarian media is a high factor in analysing reasons for one not voicing their opinion, the question that we are investigating in this study is to what extent does social media play in the role towards voicing one's opinion. It may be argued that social media helps to create conditions such as anonymity and the sense of being behind closed doors, which contributes to a higher level of confidence in expressing a person's views.

On the other hand, it may argued that the use of social media creates a spiral of silence because these days people give a high level of importance to their online profile, which affects their reputation in the public, among friends and even work colleagues. The use of social media has advanced to the extent that it is used for all kinds of purposes including job recruitments. For these reasons one may always be wary of speaking their mind and voicing their true opinion. The Spiral of Silence is supported when using a centralized traditional media such as television and newspapers and further maintained by the fear of isolation such as government

punishment. However, Hochheimer and Al Emad (2013) have argued that the theory is weakened when people use modern media which had a decentralized ownership. Individuals, who use social networking sites such as Facebook, may be aware that their views are a minority, however, are confident that there are others who share their views, so they may feel supported and hopeful. Soueif (2011) gives credit to the first 20% of people who voiced their opinions through social media claiming that they had the initial strength and courage to voice express what they believe is the truth.

## **Chapter 3**

### **METHODOLOGY**

The current study examines media effect on climate of opinion related to the issue of federalism in Libya by applying spiral of silence theory. For the purpose of this research, TV has been selected as mainstream media, while Facebook has been chosen to test an influence of new media. In particular, this research focuses on two major concepts deriving from spiral of silence theory, which are climate of opinion and fear of isolation in relation to the impact of either of the selected media outlets.

For instance, as it has been mentioned in previous chapters, the influence of social networking sites, such as Facebook, which is a platform for pro-federalists to voice their opinions, may give Libyans the sense that federalism will succeed. In this case, people are more likely to form a climate of opinion based on the majority opinion and the winning team. On the other hand, Libyans who mostly watch television might be heavily influenced by anti-federalist views and are more likely to voice anti-federalism opinions, believing that it is the most popular and winning idea.

Along these lines, in order to collect the data, a survey of a random sample of as large number as possible of Libyan residents in North Cyprus, is conducted. The survey is designed to measure the characteristics of participants from different regions of Libya (mainly Cyrenaica, Tripolitania), regarding their regions, exposure to traditional media, access to Facebook, ways of using Facebook, the relevance of the controversial political issue (the debate about federalism) to them, assessment of

political opinions about the federalism, and how they express their own opinion about this topic among different circles of friends.

To sum up, based on the predictions of the spiral of silence theory, two major scopes are measured in the survey:

- (1) The effect of traditional and new media on formation of climate of opinion regarding federalism issue;
- (2) their willingness to speak out about this issue by means of computer mediated communication and Facebook in particular.

### **3.1 Research Methods**

For the present study Quantitative Research Methodology was favored. Data have been collected through questionnaire, consisting of 40 questions. The content of questionnaire has been developed in accordance with research objectives in order to answer the major research questions, which are as follow:

1. What is the role of territorial affiliation in determining an individual's opinion on the federalism debate?
2. What is the role of the media outlet followed by the individual to determine his opinion about the federalism debate?
3. How do territorial affiliation, media exposure and the social circle (reference group) influence the individual's willingness to express his opinion on the federalism debate?

Furthermore, Likert scale (with “strongly agree” on one end and “strongly disagree” on the other) has been used as one of the methods to evaluate the research findings and represent the value of responses, where the mean of these values was calculated by applying statistic functions of Excel software. The average of all values is determined by the arithmetic mean equation (Levin, 2006, p.99).

$$\mu = \frac{\sum fm}{N}$$

In addition, ANOVA analysis has been applied in order to measure the significance of the findings. The acronym ANOVA refers to analysis of variance and is a statistical procedure used to test the degree to which two or more groups vary or differ in an experiment (Levin, 2006). The F ratio in ANOVA test is “the analysis of variance yields an F ratio in which variation between groups and variation within groups are compared.” (Levin, 2006, p.278), the Alpha ( $\alpha$ ) risk is “the risk of incorrectly deciding to reject the null hypothesis. If the confidence interval is 95%, then the ( $\alpha$ ) is 5% or 0.05” (Montgomery, 2001, p.34) and the P-value is “the probability that the test statistic will take one value that is at least as extreme as the observed value of the statistic when the null hypothesis is true” (Montgomery, 2001, p.37).

### **3.1.1 Advantages of Using Surveys**

Surveys allow researchers to collect a large amount of data in a relatively short period of time. Surveys are less expensive than many other data collection techniques. Surveys can be used to collect information on a wide range of things, including personal facts, attitudes, past behaviors and opinions (Wimmer & Dominick, 2013).

### **3.1.2 Disadvantages of Using Surveys**

Poor survey construction and administration can undermine otherwise well-designed studies. The answer choices provided on a survey may not be an accurate reflection of participants. While random sampling is generally used to select participants, response rates can bias the results of a survey (Wimmer & Dominick, 2013).

### **3.2 Research Design**

To encourage primary data from participants, quantitative method was most preferred. The quantitative method was arranged because encouraging responses by field survey is quick and can be easily measured. Besides, since the whole population of Libyan residents in North Cyprus cannot be effectively covered, it gives rooms for an experimented size to be decided, as well as makes it possible for outcomes to be generalized. Quantifying research answers make it conceivable for the researcher to easily make estimation of the subject under review.

### **3.3 Questionnaire Design**

For the collection of data from the Libyan residents in North Cyprus, the questionnaires were spread out. The study was limited to 100 participants who actually live in North Cyprus. The questionnaire consists of totally 40 questions, and divided into three sections. The first part consists of questions about the general demographic information and their regional background. The second part aimed to determine to what extent respondents are exposed to traditional media and use Facebook for general purposes. The third part intended to measure how important it is for them to be able to assess the climate of opinion about controversial issues through TV channels and among different social groups, including close friends, broader circle of Facebook friends, and people in the society.

### **3.4 Population**

The population of this study was recognized as the Libyan residents in north Cyprus in particular those who are living in the city of Famagusta, since it is the same city where the researcher resides. It was planned to poll Libyans from other cities in North Cyprus if the number of the respondents in Famagusta is not adequate. In this study 100 respondents from different provinces in Libya are polled (mainly

Cyrenaica, Tripolitania and Fezzan). The population of this study was composed of Libyan Facebook users and TV viewers. Thus, in this research, the purposive sampling technique was adopted to arrive at the simple magnitude.

### **3.5 Data Gathering and Variables**

The territorial affiliation is the primary independent variable in the current study, whilst, the participants responses are the dependent variable. The respondents concern for the issue of the adoption of federal system is measured. The respondents were also asked how important the issue is to them and how would they rank their concern for the adoption of federal system issue, their knowledge about the issue, how much do they know about the federalism debate, the frequency they see coverage about this issue on Facebook or traditional media and how often do they have arguments with friends or strangers about the issue in Facebook or real world. The respondents were also asked about their willing to voice their own opinion about federalism system in Facebook or in front of friends or strangers. The respondents were also asked to state their demographic and regional information such as their age, their regions and their regions of origins, citizenship, and the frequency of Facebook uses. Furthermore, they were also asked about the frequency with which they use Facebook for general and political purposes.

The spiral of silence effect is measured in two stages, the first one is the assessment of the climate of opinion and the second is willingness to speak out to close friends, strangers, one's broader circle of Facebook friends, and social groups.



## **Chapter 4**

### **DATA ANALYSIS AND FINDINGS**

This chapter provides the major findings of this study. The purpose of this study was to examine the effects of media influence in assessing the climate of opinion. The spiral of silence theory was tested among Libyans participants who use Television and Facebook as their main source of news and communication. Further, the spiral of silence and fear of isolation according to public opinion was examined between which is the stronger and more powerful source of media; TV or Facebook in effecting ones' opinion. The researcher assumed a set of hypotheses which through processing the research findings on them will be able to achieve the purpose of this study.

#### **4.1 Testing the Research Hypotheses**

For the purpose of this research, it was essential to define criteria to classify respondents as either “light”, “medium”, and “heavy” TV viewers and Facebook users. As it is explained in introductory chapter, it was decided to follow categorization of Bryant and Zillmann (2002), who identified the number of hours that can classify individuals into light (1 hour or less daily), medium (2 or 3 hours daily) or heavy TV viewers (4 or more hours daily). Besides, research also tends to distinguish heavy TV viewers (HTV) and heavy Facebook users (HFU) in accordance with respondents' responses on the amount of time they interact with either of the media.

Accordingly, three hypotheses were tested for this research in order to achieve the purpose of study and answer the research questions.

H1a: Heavy TV viewers will have more unfavorable opinion of Federalism than Heavy Facebook users.

H1b: Pro-federalism who are heavy TV viewers are less likely to voice their opinion than pro-federalism who are heavy Facebook users.

H1c: Anti-federalism who are heavy Facebook users are less likely to voice their opinion than Anti-federalism who are heavy TV viewers.

H2a: people from Cyrenaica region will have more favorable opinion of Federalism than people from outside Cyrenaica region.

H2b: Heavy TV viewers from outside Cyrenaica region will have a more unfavorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya.

H2c: Heavy Facebook users from Cyrenaica will have a more favorable opinion of Federalism than Heavy Facebook users from outside Cyrenaica region.

H2d: Heavy Facebook users from outside Cyrenaica region will have less unfavorable opinion of Federalism than Heavy TV viewers from outside Cyrenaica region.

H2f: Heavy Facebook users from Cyrenaica region will have a more favorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya.

H3a: Highest levels of spiral of silence will be recorded among:

1. Pro-federalism who are heavy TV viewers with majority circle of friends from outside Cyrenaica region.
2. Anti-federalism who are heavy Facebook users viewers with majority circle of friends from Cyrenaica region.

H3b: Lowest levels of spiral of silence will be recorded among:

1. Pro-federalism who are heavy Facebook users from Cyrenaica region with majority circle of friends from Cyrenaica region.
2. Anti-federalism who are heavy TV viewers from outside Cyrenaica region with majority circle of friends from outside Cyrenaica region.

The hypotheses were tested with 5-point Likert scale to find out the respondents' attitudes about each survey item. The Likert scale scores counted in 1- Strong Disagree, 2 - Disagree, 3- undecided, 4- Agree, and 5- Strongly Agree.

Main arguments of spiral of silence theory is compared with the responses of the study sample, so that the following queries could be answered:

1. What is the role of territorial affiliation in determining an individual's opinion on the federalism debate?
2. What is the role of the media outlet followed by the individual to determine his opinion about the federalism debate?

3. How territorial affiliation, media exposure and the social circle (reference group) influence the individual's willingness to express his opinion on the federalism debate?

The responses and findings from their test give important answers and explanations to the research questions.

## **4.2 Research Findings**

Research findings for this study were collected by using quantitative methodology and a survey questionnaire was given to the respondents to answer its questions.

### **4.2.1 Demographics of the Respondents**

By using a survey questionnaire, a total of 100 surveys were distributed to the respondents and the demographic results were as follows:

Table (1) report the frequencies and percentages reported for the participants' gender of the 100 responses, 16 (16%) of the participants identified themselves as female and 84 (84%) identified themselves as male.

Table 1: Participant's gender

	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
<b>Male</b>	84	84	84
<b>Female</b>	16	16	100
<b>Total</b>	100	100	

Table (2) report the frequencies and percentages reported for the participants' age of the 100 responses on question 36 (What is your age), 4 (4%) of the participants identified themselves as younger than 20 years, 28 (28%) between 21-25 years, 31 (31%) between 26-30 years and 37(37%) identified themselves as between 31-40 years.

Table 2: Participants' age

Age	Frequency	Percent	Cumulative Percent
Younger than 20 years	4	4	4
21-25 years	28	28	32
31-40 years	31	31	63
Older than 40	37	37	100
Total	100	100	

Table (3) report the frequencies and percentages reported for the participants' education of the 100 responses on question 37 (What is your education), 31 (31%) of the participants identified themselves as an undergraduate, 15 (15%) as associate degree, 43 (43%) as graduate and 11 (11%) identified themselves as postgraduate students.

Table 3: Participants' level of education

	Frequency	Percent	Cumulative Percent
Under Graduate	31	31	31
Associate degree	15	15	46
Graduate	43	43	89
Postgraduate	11	11	100
Total	100	100	

Table (4) reports the frequencies and percentages reported for the participants region of the 100 responses on question 38 (What is your region), 51 (51%) of the participants identified themselves as from Cyrenaica, 47 (47%) from Tripolitania and 2 (2%) identified themselves as from other regions.

Table 4: Participant's region

	Frequency	Percent	Cumulative Percent
<b>Cyrenaica</b>	51	51	51
<b>Tripolitania</b>	47	47	98
<b>Others</b>	2	2	100
<b>Total</b>	100	100	

#### 4.2.2 Research Findings According to Responses on the Questionnaire

Gathered data was entered into Excel software as shown in table B1 (see appendix B), and then analyzed statistically by SPSS 14. Degrees of disagreement or agreement were calculated and, subsequently, the mean of these values was determined by using statistic functions of Excel software.

Responses for question 1: I do believe I'm a heavy Facebook user. These responses demonstrate that, 18 participants choose "strongly agree" as an answer, 23 participants choose "agree", 32 participants choose "undecided", 23 participants choose "disagree" and only 4 participants choose "strongly disagree" as a response. The mean for question 1 which is 3.28 out of 5 illustrates that greater number of the sample's population uses Facebook longer than other people around them.

Responses for question 2: I follow pages on Facebook that entertain me. These responses demonstrate that, 13 participants choose "strongly agree" as an answer, 51 participants choose "agree", 12 participants choose "undecided", 17 participants choose "disagree" and only 7 participants choose "strongly disagree". The mean value for question 2 which is 3.46 out of 5 showed that a large proportion of the respondents use Facebook as an entertainment tool.

Responses for question 3: I follow pages on Facebook that educate me. These responses demonstrate that, 9 participants choose “strongly agree” as an answer, 37 participants choose “agree”, 22 participants choose “undecided”, 23 participants choose “disagree” and only 9 participants choose “strongly disagree”. The mean value for question 3 which is 3.14 out of 5 illustrates that considerable number of the sample’s population follow Facebook pages that educate them. However, they are not as many as those who use it for entertainment.

Responses for question 4: I follow pages on Facebook that inform me. These responses demonstrate that, 12 participants choose “strongly agree” as an answer, 57 participants choose “agree”, 15 participants choose “undecided”, 11 participants choose “disagree” and only 5 participants choose “strongly disagree”. The mean value for question 4 which is 3.6 out of 5 illustrates that the majority of the sample’s population follow Facebook pages to be informed. This shows how the respondents in the study sample rely on Facebook as a source of information, since they expatriate away from their homeland.

Responses for question 5: I follow pages on Facebook that support my political opinion. These responses demonstrate that, 10 participants choose “strongly agree” as an answer, 50 participants choose “agree”, 25 participants choose “undecided”, 11 participants choose “disagree” and only 4 participants choose “strongly disagree”. The mean value for question 5 which is 3.51 out of 5 demonstrates that a considerable number of the sample’s population follow Facebook pages that are in line with their political views.

Responses for question 6: I follow pages on Facebook that support different political views than mine. These responses demonstrate that, 1 participant choose “strongly agree” as an answer, 30 participants choose “agree”, 32 participants choose “undecided”, 18 participants choose “disagree” and only 9 participants choose “strongly disagree”. The mean value for question 6 which is 2.86 out of 5 shows that respondents follow Facebook pages that support different political views.

Responses for question 7: I use Facebook to share and post my ideas and thoughts. These responses demonstrate that, 2 participants choose “strongly agree” as an answer, 49 participants choose “agree”, 20 participants choose “undecided”, 21 participants choose “disagree” and only 8 participants choose “strongly disagree”. The mean value for question 7 which is 3.16 out of 5 illustrates that majority of respondents share their ideas and thoughts on Facebook.

Responses for question 8: I'm interested with federalism debate on Facebook. These responses demonstrate that, 5 participants choose “strongly agree” as an answer, 47 participants choose “agree”, 26 participants choose “undecided”, 18 participants choose “disagree” and only 4 participants choose “strongly disagree”. The mean value for question 8 which is 3.31 out of 5 illustrates that considerable number of the sample’s population interested and follow news about the federalism debate on Facebook.

Responses for question 9: I do write and share posts that support my opinion about federalism on Facebook. These responses demonstrate that, 4 participants choose “strongly agree” as an answer, 22 participants choose “agree”, 26 participants choose “undecided”, 39 participants choose “disagree” and only 9 participants choose



“strongly disagree”. The mean value for question 9 which is 2.73 out of 5 shows that more than half of respondents share or write posts that support their opinion about federalism on Facebook.

Responses for question 10: I do have arguments with friends on Facebook about Federalism. These responses demonstrate that, 3 participants choose “strongly agree” as an answer, 25 participants choose “agree”, 25 participants choose “undecided”, 41 participants choose “disagree” and only 6 participants choose “strongly disagree”. The mean value for question 10 which is 2.78 out of 5 illustrates that slightly more than half of the sample’s population can have arguments with friends on Facebook about Federalism.

Responses for question 11: I believe that my friends (on Facebook) sharing the same opinion as mine about Federalism. These responses demonstrate that, 1 participant choose “strongly agree” as an answer, 19 participants choose “agree”, 52 participants choose “undecided”, 23 participants choose “disagree” and only 5 participants choose “strongly disagree”. The mean value for question 11 which is 2.88 out of 5 illustrates that more than half of respondents believe that their friends on Facebook share the same opinion about federalism.

Responses for question 12: Even when my opinion is in minority I feel comfortable when writing or sharing posts that support my opinion about federalism. These responses demonstrate that, 6 participants choose “strongly agree” as an answer, 20 participants choose “agree”, 34 participants choose “undecided”, 36 participants choose “disagree” and only 4 participants choose “strongly disagree”. The mean

value for question 12 which is 2.88 out of 5 shows that more than half of respondents speak out on Facebook.

Responses for question 13: I believe most Libyan Facebook pages are in favor of federalism. These responses demonstrate that, 1 participant choose “strongly agree” as an answer, 38 participants choose “agree”, 52 participants choose “undecided”, 9 participants choose “disagree” and none choose “strongly disagree”. The mean value for question 13 which is 3.31 out of 5 illustrates that considerable number of the sample’s population believe that most Libyan Facebook pages are in favor of federalism, which support research assumption that Facebook is an alternative platform for federalists.

Responses for question 14: I believe that information about federalism on Facebook are mostly false. These responses demonstrate that, 2 participants choose “strongly agree” as an answer, 26 participants choose “agree”, 51 participants choose “undecided”, 21 participants choose “disagree” and none choose “strongly disagree”. The mean value for question 14 which is 3.09 out of 5 illustrates that considerable number of the sample’s population believe that information about federalism on Facebook is not adequately reliable.

Responses for question 15: I prefer Facebook more than TV to follow news. These responses demonstrate that, 9 participants choose “strongly agree” as an answer, 43 participants choose “agree”, 22 participants choose “undecided”, 18 participants choose “disagree” and only 8 participants choose “strongly disagree”. The mean value for question 15 which is 3.27 out of 5 illustrates that a large number of the sample’s population prefer Facebook over the TV, in order to follow news. This

clearly illustrates the growing popularity of Facebook at the expense of TV and traditional media in general.

Responses for question 16: How much time do you spend on Facebook per day? These responses demonstrate that, 18% of participants choose (1 hour or less) as an answer, 30% of participants choose (2 hours), 28% participants choose (3 hours), 21% of participants choose (4 hours) and only 4% of participants choose (5 hours or more) this shows that a majority of respondents are medium and heavy Facebook users.

Responses for question 17: I watch TV channels that entertain me. These responses demonstrate that, 19 participants choose “strongly agree” as an answer, 60 participants choose “agree”, 10 participants choose “undecided”, 9 participants choose “disagree” and only 2 participants choose “strongly disagree”. The mean value for question 17 which is 3.9 out of 5 illustrates that the majority of the sample’s population watch entertainment programs on TV.

Responses for question 18: I watch TV channels that educate me. These responses demonstrate that, 9 participants choose (strongly agree) as an answer, 28 participants choose (agree), 25 participants choose (undecided), 36 participants choose (disagree) and only 2 participants choose (strongly disagree). The mean value for question 18 which is 3.1 out of 5 illustrates that a considerable number of the sample’s population watch educational programs on TV. However, they are not as many as those who watch entertainment programs.

Responses for question 19: I watch TV channels that inform me. These responses demonstrate that, 2 participants choose “strongly agree” as an answer, 43 participants choose “agree”, 26 participants choose “undecided”, 27 participants choose “disagree” and only 2 participants choose “strongly disagree”. The mean value for question 19 which is 3.2 out of 5 illustrates that considerable number of the sample’s population use TV as a source of information.

Responses for question 20: I watch TV channels that support my political opinion. These responses demonstrate that, 3 participants choose “strongly agree” as an answer, 38 participants choose “agree”, 39 participants choose “undecided”, 18 participants choose “disagree” and only 2 participants choose “strongly disagree”. The mean value for question 20 which is 3.2 out of 5 illustrates that a significant number of the sample’s population watch TV channels that support their political opinion.

Responses for question 21: I watch TV channels that support different views than mine. These responses demonstrate that, none choose “strongly agree” as an answer, 9 participants choose “agree”, 40 participants choose “undecided”, 42 participants choose “disagree” and only 9 participants choose “strongly disagree”. The mean value for question 21 which is 2.5 out of 5 illustrates that half of the respondents watch channels contradicting their own political views. Comparing to the results of question 20, it shows that more respondents watch TV channels that support their political opinion, rather than watching those which are against it.

Responses for question 22: I do have arguments with my friends (in real world) about Federalism. These responses demonstrate that, 2 participants choose “strongly

agree” as an answer, 42 participants choose “agree”, 29 participants choose “undecided”, 27 participants choose “disagree” and none choose “strongly disagree”. The mean value for question 22 which is 3.2 out of 5 illustrates that considerable number of the respondents have arguments with friends (in real world) about Federalism.

Responses for question 23: I believe my friends (in real world) have the same opinion as mine about Federalism. These responses demonstrate that, none choose “strongly agree” as an answer, 27 participants choose “agree”, 48 participants choose “undecided”, 25 participants choose “disagree” and none choose “strongly disagree”. The mean value for question 23 which is 3 out of 5 illustrates that considerable number of the respondents believe that their friends (in real world) have the same opinion about Federalism.

Responses for question 24: I do have arguments with strangers about Federalism in my daily life. These responses demonstrate that, none choose “strongly agree” as an answer, 22 participants choose “agree”, 31 participants choose “undecided”, 38 participants choose “disagree” and only 9 participants choose “strongly disagree”. The mean value for question 24 which is 2.7 out of 5 shows that more than half of respondents can have arguments with strangers on the subject of federalism. However, comparing this result with the findings of question 23, it is apparent that respondents would rather have an argument with friends about federalism than with strangers in daily live.

Responses for question 25: I feel comfortable when speaking out my opinion about federalism with strangers even when my opinion is in minority. These responses

demonstrate that, 3 participants choose “strongly agree” as an answer, 19 participants choose “agree”, 29 participants choose “undecided”, 36 participants choose “disagree” and only 13 participants choose “strongly disagree”. The mean value for question 25 which is 2.6 out of 5 illustrates that slightly more than half of questioned respondents do not feel comfortable when speaking out their opinion about federalism with strangers, when their opinion is in minority.

Responses for question 26: I'm interested with federalism debate on TV. These responses demonstrate that, 1 participant choose “strongly agree” as an answer, 35 participants choose “agree”, 35 participants choose “undecided”, 27 participants choose “disagree” and only 2 participants choose “strongly disagree”. The mean value for question 26 which is 3.1 out of 5 illustrates that a considerable number of the respondents are interested with federalism debate on TV.

Responses for question 27: I believe that most Libyan TV channels are in favor of federalism. These responses demonstrate that, none choose “strongly agree” as an answer, 1 participants choose “agree”, 38 participants choose “undecided”, 51 participants choose “disagree” and only 10 participants choose “strongly disagree”. The mean value for question 27 which is 2.3 out of 5 illustrates that less than half of respondents believe that most Libyan TV channels are in favor of federalism.

Responses for question 28: I believe that information about federalism on TV are mostly false. These responses demonstrate that, 12 participant choose “strongly agree” as an answer, 23 participants choose “agree”, 49 participants choose “undecided”, 16 participants choose “disagree” and none choose “strongly disagree”. The mean value for question 28 which is 3.3 out of 5 illustrates that a majority of the

sample's population believe that information about federalism on TV are mostly false.

Responses for question 29: I believe it is better for Libya to be a Federal state. These responses demonstrate that, 11 participant choose "strongly agree" as an answer, 30 participants choose "agree", 19 participants choose "undecided", 31 participants choose "disagree" and only 9 participants choose "strongly disagree". The mean value for question 29 which is 3 out of 5 illustrates that the majority of respondents agree that it is better for Libya to be a Federal state.

Responses for question 30: I and my friends are coming from the same region. These responses demonstrate that, 3 participant choose "strongly agree" as an answer, 29 participants choose "agree", 44 participants choose "undecided", 23 participants choose "disagree" and only 1 participant choose "strongly disagree". The mean value for question 30 which is 3.1 out of 5 illustrates that considerable number of the respondents have a social circle from their own region.

Responses for question 31: My friends are coming from different region than me. These responses demonstrate that, 1 participant choose "strongly agree" as an answer, 19 participants choose "agree, 47 participants choose "undecided", 30 participants choose "disagree" and only 3 participants choose "strongly disagree". The mean value for question 31 which is 2.9 out of 5 illustrates that a considerable number of the respondents have a social circle from different regions. However, according to responses on question 30, their percentage is less than those with a social circle from their own region.

Responses for question 32: I prefer TV more than Facebook to follow news. These responses demonstrate that, 4 participants choose “strongly agree” as an answer, 22 participants choose “agree”, 22 participants choose “undecided”, 40 participants choose “disagree” and 12 participants choose “strongly disagree”. The mean value for question 32 which is 2.7 out of 5 illustrates that over a half of respondents prefer TV over the Facebook to follow news. However, responses on question 15 show that the number of those who prefer Facebook is even greater.

Responses for question 33: How many hours a day do you watch TV. Responses for demonstrate that, 8% of participants choose (1 hour or less) as an answer, 42% of participants choose (2 hours), 40% participants choose (3 hours), 10% of participants choose (4 hours). This illustrates compared with responses for question 16 that respondents tend to spend more time on Facebook rather than TV. Responses for question 34: What kind of TV program do you like to watch on TV? Responses demonstrate that, 41% of participants choose (Entertainment) as an answer, 31% of participants choose (Sports), 10% participants choose (News), 18% of participants choose (Documentaries). This illustrates that majority of respondents watch TV for the purpose of entertainment.

Responses for question 39: Which Media outlet are you most familiar with? Responses demonstrate that, 34% of participants choose (TV) as an answer and 66% of participants choose (Social Media). This illustrates that increasing popularity of networking sites and its superiority on TV among the study sample. Responses for question 40: Do you have a user profile in: Facebook – YouTube – Twitter - Instagram)? Responses demonstrate that, 96% of participants have Facebook account, 25% YouTube, 26% Twitter and 40% of participants have Instagram



accounts. This illustrates increasing popularity of Facebook and its superiority over the other social media among the study sample.

#### **4.2.3 Findings from Tests of Hypotheses**

In order to test each hypothesis the researcher has identified questions that control the value of the variables (Independent and dependent) contained in the hypothesis. According to Bernold and Lee 2009, the dependent variable is the output which the researcher aims to monitor to see if it is influenced or not. On the other hand, the independent variable is the individual variables that have an effect on the dependent variable (Bernold & Lee 2009). To start with, H1a which says; “Heavy TV viewers will have more unfavorable opinion of Federalism than Heavy Facebook users”. This hypothesis contains three variables: “Heavy TV viewers” (HTV), “Heavy Facebook users” (HFU), which are independent variables, and “opinion about Federalism”, which is dependent variable. In order to control these variables, researcher has found seven questions, Q1, Q15, Q16, Q29, Q32, Q33 and Q39 (see Table B in Appendix B). By analyzing these questions, the researcher was able to identify the two groups of Heavy TV viewers (HTV), Heavy Facebook users (HFU), and the opinion of each participant about federalism.

Table 6: Descriptive statistics of hypothesis 1a (1)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
<b>Heavy Tv viewers</b>	34	2.6765	1.06517	.18267	2.3048	3.0481	1.00	4.00
<b>Heavy Facebook users</b>	66	3.2121	1.22179	.15039	2.9118	3.5125	1.00	5.00
<b>Total</b>	100	3.0300	1.19304	.11930	2.7933	3.2667	1.00	5.00

According to the table 6 the mean of (HTV)' opinion about federalism is 2.6765, whilst it is 3.2121 with (HFU), which is consistent with the statement of H1a, "Heavy TV viewers will have a more unfavorable opinion of Federalism than Heavy Facebook users". Furthermore, to test the significance for (H1a), as illustrated in table 7, the ANOVA was significant with  $F = 4.692$ ,  $p = 0.033$  which is less than significant level ( $\alpha=.05$ ).

Table 7: ANOVA for hypothesis 1a (2)

	Sum of Squares	df	Mean Square	F	P-value Sig.
<b>Between Groups</b>	6.439	1	6.439	4.692	.033
<b>Within Groups</b>	134.471	98	1.372		
<b>Total</b>	140.910	99			

H1a posited that (HTV) have a more unfavorable opinion about federalism than (HFU) and this expectation was reinforced as the results presented in Tables 6 and 7.

Hypothesis 1b claimed that "Pro-federalism who are heavy TV viewers are less likely to voice their opinion than pro-federalism who are heavy Facebook users".

The same process followed by the researcher to test the previous hypothesis was followed to test this hypothesis, however, with using the appropriate questions (Q1, Q15, Q16, Q22, Q24, Q25, Q29, Q32, Q33 and Q39) in the analysis process, see tables B4 and B5 (Appendix B).

According to the table C2 (Appendix C) the mean of (HFU) and (HTV) according to their willing to voice their opinion are (3.5269 – 2.4667) respectively, and by testing significance for (H1b) as explained in table 8 the ANOVA was significant difference with  $F = 24.068$ ,  $p < 0.001 < (\alpha = .05)$ . Consequently, this hypothesis was also supported.

Table 8: ANOVA for Hypothesis 1b

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P-value Sig.</b>
<b>Between Groups</b>	8.499	1	8.499	24.068	.000
<b>Within Groups</b>	13.772	39	.353		
<b>Total</b>	22.271	40			

Hypothesis 1c suggested that “Anti-federalism who are heavy Facebook users are less likely to voice their opinion than Anti-federalism who are heavy TV viewers”. The same process followed by the researcher to test the previous hypotheses was also followed to test this hypothesis, and again with using the appropriate questions (Q1, Q15, Q16, Q22, Q24, Q25, Q29, Q32, Q33 and Q39) in the analysis process, see tables B6 and B7 (Appendix B).

According to the Table C3 (Appendix C) the mean of response for anti-federalists who are (HFU) and anti-federalists who are (HTV) according to their willingness to voice their opinion is (2.3889 – 3.1042) respectively, and by testing significance for

H1c (“Anti-federalism who are heavy Facebook users are less likely to voice their opinion than Anti-federalism who are heavy TV viewers”) as explained in Table 9 the ANOVA was significant difference with  $F = 8.203$ ,  $p = 0.007 < (\alpha=.05)$ . Thus, this hypothesis was like wise supported.

Table 9: ANOVA for Hypothesis 1c

	Sum of Squares	df	Mean Square	F	P-value Sig.
<b>Between Groups</b>	4.912	1	4.912	8.203	.007
<b>Within Groups</b>	22.752	38	.599		
<b>Total</b>	27.664	39			

Hypothesis 2a proposed that “people from Cyrenaica region will have more favorable opinion of Federalism than people from outside Cyrenaica region”. This hypothesis contains two variables: region and perceived opinion of Federalism by people from Cyrenaica region and outside of this region. The first of them is the independent variable, and the second one is the dependent variable. According to Table B1 (Appendix B), two questions are controlling these variables (Q29 and Q38) which are used in the analysis process, (see Tables B8 and B9, (Appendix B)). According to the Table C4 (Appendix C) the mean of people from Cyrenaica region’s response is (3.9020), and the mean of people from outside Cyrenaica region’s response is (1.1224). By testing significance for H2a (“people from Cyrenaica region will have more favorable opinion of Federalism than people from outside Cyrenaica region”) as explained in Table 10 the ANOVA was significant difference with  $F = 125.54$ ,  $p = 0.000 < (\alpha=.05)$ . Accordingly, this hypothesis was similarly supported.

Table 10: ANOVA for Hypothesis 2a

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P-value Sig.</b>
<b>Between Groups</b>	79.135	1	79.135	125.540	.000
<b>Within Groups</b>	61.775	98	.630		
<b>Total</b>	140.910	99			

Hypothesis 2b claimed that “heavy TV viewers from outside Cyrenaica region will have a more unfavorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya”. This hypothesis contains three variables: HTV, region, and perceived opinion of Federalism, where the first two variables are independent, while the third one is the dependent variable. According to Table B1 (Appendix B), five questions are monitoring these variables (Q29 - Q32 - Q33 - Q38 and Q39) which are used in the analysis process, see Tables B10 and B11 (Appendix B).

According to the Table C5 (Appendix C) the mean of responses for HTV from Cyrenaica is (3.2857), and the mean of responses for HTV from outside Cyrenaica region is (1.6923). By testing significance for H2b (“heavy TV viewers from outside Cyrenaica region will have a more unfavorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya”) as explained in Table 11 the ANOVA was significant difference with  $F = 38.250$ ,  $p < 0.001 < (\alpha=.05)$ . For that reason, this hypothesis is supported

Table 11: ANOVA for Hypothesis 2b

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P-value Sig.</b>
<b>Between Groups</b>	20.386	1	20.386	38.250	.000
<b>Within Groups</b>	17.055	32	.533		
<b>Total</b>	37.441	33			

Hypothesis 2c claimed that “Heavy Facebook users from Cyrenaica will have a more favorable opinion of Federalism than Heavy Facebook users from outside Cyrenaica region”. This hypothesis contains three variables: HFU, region, and perceived opinion of Federalism. The first two of them are independent variables, while the third one is the dependent variable. According to Table B1 (Appendix B), six questions are monitoring these variables (Q1 - Q15 – Q16 – Q29 - Q38 and Q39) which are used in the analysis process, see Tables B12 and B13 (Appendix B).

According to the Table C6 (Appendix C) the mean of responses for HFU from Cyrenaica is (4.3333), and the mean of responses for HFU from outside Cyrenaica region is (2.2778). Through testing significance for H2c (“Heavy Facebook users from Cyrenaica will have a more favorable opinion of Federalism than Heavy Facebook users from outside Cyrenaica region”), as described in Table 12 the ANOVA was significant difference with  $F = 158.667$ ,  $p = 0.000 < (\alpha=.05)$ . Therefore, this hypothesis is supported as well.

Table12: ANOVA for Hypothesis 2c

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P-value Sig.</b>
<b>Between Groups</b>	69.141	1	69.141	158.667	.000
<b>Within Groups</b>	27.889	64	.436		
<b>Total</b>	97.030	65			

Hypothesis 2d claimed that “Heavy Facebook users from outside Cyrenaica region will have less unfavorable opinion of Federalism than Heavy TV viewers from outside Cyrenaica region”. This hypothesis contains four variables: HFU, HTV, region, and perceived opinion of Federalism. The first three of them are independent variables, while the fourth one is the dependent variable. According to Table B1

(Appendix B), six questions are monitoring these variables (Q1 - Q15 – Q16 – Q29 - Q32 - Q33 - Q38 and Q39) which are used in the analysis procedure, see Tables B14 and B15 (Appendix B).

According to the Table C7 (Appendix C) the mean of responses for HFU from out Cyrenaica is (2.2778), and the mean of responses for HTV from the outside Cyrenaica region is (1.6923). Through testing significance for H2d (“Heavy Facebook users from outside Cyrenaica region will have less unfavorable opinion of Federalism than Heavy TV viewers from outside Cyrenaica region”), as explained in Table 13 the ANOVA was significant difference with  $F = 6.997$ ,  $p = 0.011 < (\alpha = .05)$ . Thus, this hypothesis is also supported.

Table 13: ANOVA for Hypothesis 2d

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P-value Sig.</b>
<b>Between Groups</b>	3.274	1	3.274	6.997	.011
<b>Within Groups</b>	21.991	47	.468		
<b>Total</b>	25.265	48			

Hypothesis 2f claimed that “Heavy Facebook users from Cyrenaica region will have more favorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya”. This hypothesis contains four variables: HFU, HTV, region, and perceived opinion of Federalism. The first three of them are independent variables, while the fourth one is the dependent variable. According to Table B1 (Appendix B), six questions are monitoring these variables (Q1 - Q15 - Q16 - Q29 - Q32 - Q33 – Q38 and Q39) which are used in the analysis procedure, see Tables B16 and B17 (Appendix B).

According to the Table C8 (Appendix C) the mean of responses for HFU from out Cyrenaica is (4.3333), and the mean of responses for HTV from Cyrenaica region is (3.2857). By testing significance for H2f (“Heavy Facebook users from Cyrenaica region will have more favorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya”), as explained in Table 14 the ANOVA was significant difference with  $F = 28.943$ ,  $p < 0.001 < (\alpha=.05)$ . Accordingly, this hypothesis is also supported.

Table 14: ANOVA for Hypothesis 2f

	Sum of Squares	df	Mean Square	F	P-value Sig.
<b>Between Groups</b>	13.557	1	13.557	28.943	.000
<b>Within Groups</b>	22.952	49	.468		
<b>Total</b>	36.510	50			

Hypothesis H3 (a, b) claimed that “highest and lowest levels of spiral of silence are quite possibly to be recorded within a certain group of people which were classified to four Categories”. This hypothesis contains four variables: HFU, HTV, region, perceived opinion of Federalism, friends' regional affiliation, and willingness to speak out. According to Table B1 (Appendix B), six questions are monitoring these variables (Q1 - Q15 – Q16 - Q22 - Q24 - Q25 – Q29 - Q39 - Q30 - Q31 - Q32 – Q33 and Q38) which are used in the analysis procedure, see Tables B18, B19, B20 and B21 (Appendix B).

According to the Table C9 (Appendix C) the mean of responses for Pro-federalism + HTV + majority circle of friends from outside Cyrenaica is (2.2222); the mean of responses for Anti-federalism + HFU + majority circle of friends from Cyrenaica is (1.9167), the mean of responses for Pro federalism + HFU from Cyrenaica +friends



from Cyrenaica is (3.8958), and finally the mean of responses for Anti federalism + HTV from outside Cyrenaica + friends outside Cyrenaica is (3.1905). By testing significance for H3 (“highest and lowest levels of spiral of silence are quite possibly to be recorded within a certain group of people which were classified to four Categories”), as explained in Table 15 the ANOVA yielded statistically significant difference with  $F = 61.210$ ,  $p < 0.001 < (\alpha=.05)$ . Accordingly, this hypothesis is also supported.

Table 15: ANOVA for Hypothesis 3

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>P-value Sig.</b>
<b>Between Groups</b>	31.084	3	10.361	61.210	.000
<b>Within Groups</b>	7.109	42	.169		
<b>Total</b>	38.193	45			

#### 4.2.4 Results of Research Questions

Responses from the study sample show a significant support to H2a (Heavy TV viewers will have more unfavorable opinion of Federalism than Heavy Facebook users.) which give a clear answer to the first research question “What is the role of territorial affiliation in determining an individual's opinion on the federalism debate?” The findings demonstrate that territorial affiliation affects very heavily on individuals opinions about federalism, whereas, most of respondents who give pro-federalism responses are from Cyrenaica while respondents who are from Tripolitania are mostly anti-federalism. As for the second research question, findings for H2b (Heavy TV viewers from outside Cyrenaica region will have a more unfavorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya), H2c (Heavy Facebook users from Cyrenaica will have a more favorable

opinion of Federalism than Heavy Facebook users from outside Cyrenaica region), H2d (Heavy Facebook users from outside Cyrenaica region will have less unfavorable opinion of Federalism than Heavy TV viewers from outside Cyrenaica region) and H2f (Heavy Facebook users from Cyrenaica region will have a more favorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya) show a significant role of the media outlet on the respondents' opinion about federalism when most of the Facebook users give more favorable opinion to federalism than TV viewers regardless their territorial affiliation. Responses also give significant support to H3a (Highest levels of spiral of silence will be recorded among: 1) Pro-federalism who are heavy TV viewers with majority circle of friends from outside Cyrenaica region; 2) Anti-federalism who are heavy Facebook users viewers with majority circle of friends from Cyrenaica region), and H3b (Lowest levels of spiral of silence will be recorded among: 1) Pro-federalism who are heavy Facebook users from Cyrenaica region with majority circle of friends from Cyrenaica region; 2) Anti-federalism who are heavy TV viewers from outside Cyrenaica region with majority circle of friends from outside Cyrenaica region), when the territorial affiliation, media exposure and the social circle (reference group) are very influential on the respondents' willingness to voice their opinion on the debate about federalism which answered the last research question.

## **Chapter 5**

### **DISCUSSION AND CONCLUSION**

#### **5.1 Summary**

This study examined the effects of media (TV and Facebook) and public views (as perceived in media outlets and Social circle of the individual) in assessing the climate of opinion about federalism in Libya. The spiral of silence theory was tested among Libyans (residing in North Cyprus) who use Television or Facebook as their main source of news and communication, and how it effects their opinion on Libya becoming a federalist state. Further, the spiral of silence and fear of isolation in relation to public opinion was examined. In particular, it has been examined which media outlet(s) has/have effected public opinions. Consequently, findings of this study revealed that Facebook has a more significant effect than TV on the respondents in assessing the climate of opinion.

#### **5.2 Conclusions Drawn from the Study**

The findings illustrate that respondents who believes their opinion is not in favor are minorities, and, thus, they are less likely to voice their view of federalism. Besides, the effect of media outlets on the opinions of the participants was evident.

Hypothesis 1a stated that HTV will have more unfavorable opinion of Federalism than HFU. This hypothesis illustrated the effect of media outlets on shaping one's opinion, as well as which of the media outlets is the most effective in the current issue. Generally, most of HTV respondents from different regions of Libya are more

likely to have unfavorable opinion of Federalism than HFU. Moreover, results for H1b (Pro-federalism who are heavy TV viewers are less likely to voice their opinion than pro-federalism who are heavy Facebook users), and H1c (Anti-federalism who are heavy Facebook users are less likely to voice their opinion than Anti-federalism who are heavy TV viewers) illustrated significant support of this point. However, HFU gave more extreme responses than HTV, which demonstrated the considerable effect of Facebook in comparison to TV in the process of shaping one's opinion. Hence, this effect distinctly appeared in respondents' willingness to voice their opinion (H1b, H1c).

Hypothesis 2a asserted that people from Cyrenaica region will have more favorable opinion of Federalism than people from outside Cyrenaica region. Analysis of the responses of participants revealed strong support of this hypothesis. Given the historical, social and economic conditions, which formed the opinion in Cyrenaica, the responses of the participants were quite anticipated, especially in view of idea of the people of Cyrenaica that adopting a federal system will ensure avoiding marginalization, which they have suffered from over the previous periods. However, on the other hand, people from outside Cyrenaica did not have a positive opinion on the adoption of the federal system, since they did not see any advantages in it for them (Bassiouni, 2013).

Consequently, surrounding social circle, which is controlled by belonging to one region or another, is a stronger factor in affecting one's opinion about federalism than media outlets, as assumed in hypotheses H2b (Heavy TV viewers from outside Cyrenaica region will have a more unfavorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya) and H2c (Heavy Facebook users from

Cyrenaica will have a more favorable opinion of Federalism than Heavy Facebook users from outside Cyrenaica region), whereas people from Cyrenaica gave more positive opinion about federalism than people from outside Cyrenaica, regardless of the media outlet they used to follow this topic. Nevertheless, the effect of the media outlets on individuals, when assessing the climate of opinion, has been proven once again through the responses of the participants, which is consistent with what is stated in hypothesis 2d (Heavy Facebook users from outside Cyrenaica region will have less unfavorable opinion of Federalism than Heavy TV viewers from outside Cyrenaica region) and hypothesis 2f (Heavy Facebook users from Cyrenaica region will have a more favorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya).

The foregoing, the circumstances that enhance the individual's willing to express an opinion or conceal it could be anticipated. Hypothesis 3 argues the highest and lowest levels of spiral of silence will be recorded among specific groups of the research sample, based on their regional affiliation, their social circle, and the media outlet they mostly follow. The spiral of silence theory emphasizes on a one's willingness to speak out their point of view on a topic, relying on whether they perceive their point of view as being in the majority or the minority, which is perceived by what individuals believe to be the climate of opinion. Individuals perceive the climate of opinion through the so-called 'quasi-statistical sense' (Noelle-Neumann, 1974). Therefore, when specific factors (which declared in H3) encounter in manipulating one's opinion, they give highest and lowest results as asserted in Hypothesis 3. Moreover, when it comes to which of the media outlets has more effect on respondents when they assess the climate of opinion, the findings for H3 clearly illustrated that Facebook has a more significant effect comparing to TV.

### **5.3 Recommendations for Further Studies**

This research has three points of weakness: the population, selection of the sample, and the absence of the qualitative data. Only one hundred respondents from various regions of Libya participate in study. Thus, undoubtedly, an enlarged data set and randomly selected sample would additionally improve the total generalizability of the results and findings of the study. Besides, due to the security problems and military operations taking place in Libya at the time, only the Libyan residents in North Cyprus (who are mostly students) were surveyed for this study, which limited the sample in one segment of whole Libyan society. Therefore, it is recommended in any further studies to collect the research sample amongst a broader range of various segments of the society.

The third weakness of the current study is the insufficiency of qualitative data, since it was set out to be conducted as a quantitative study. Nevertheless, during data gathering, participants spoke about their lived experiences and gave reasons for their responses on the survey questions, and their attitude towards the federalism debate in Libya, as well as their way perceiving the climate of opinion, whether through the various media outlets they follow, or through their social circle of friends or family. Therefore, various aspects of the whole issue were not exhibited, in addition to much significant information that could be very important in achieving the purpose of this study and add more reliability to its results. Hence, in forthcoming spiral of silence test or research inclusion of a qualitative element would improve the findings.

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## **APPENDICES**

## **Appendix A: Questionnaire**

### **Participant's questionnaire**

#### **INVITATION TO PARTICIPANTS**

Dear Participant:

I am a M.A. student and working on my thesis at Eastern Mediterranean University (EMU) the department of Communication and Media Studies. My thesis is titled by "DEBATE ON FEDERALISM AND SPIRAL OF SILENCE". I'm working on this research under the supervision of Assoc. Prof. Dr. Aysu Arsoy. This dissertation is focusing on finding out the effects of mass media on the climate of opinion. I kindly ask you to allocate part of your time to fill this questionnaire; with the obligation your responses will remain confidential. Your contribution is necessary and very important for this research.

My name: Khaled Elshabi,

Faculty of Communication and Media Studies,

Eastern Mediterranean University,

Famagusta, Turkish Republic of Northern Cyprus (TRNC).

Via Mersin 10, TURKEY

E-mail: [Kha.elshabi@yahoo.com](mailto:Kha.elshabi@yahoo.com)

**Note:**

The following pages contain a number of statements with which some people agree and others disagree. Please rate how much you personally agree or disagree with these statements-how much they reflect how you feel or think personally. Use the following scale:

		<b>Strongly Agree</b>	<b>Agree</b>	<b>Undecided</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
<b>1.</b>	Do you believe that you are a heavy Facebook user?					
<b>2.</b>	I follow pages on Facebook that entertain me					
<b>3.</b>	I follow pages on Facebook that educate me					
<b>4.</b>	I follow pages on Facebook that inform me					
<b>5.</b>	I follow pages on Facebook that support my political opinion					
<b>6.</b>	I follow pages on Facebook that support different political views than mine					
<b>7.</b>	I use Facebook to share and post my ideas and thoughts					
<b>8.</b>	I'm interested with federalism debate on Facebook					
<b>9.</b>	I do write and share posts that support my opinion about federalism on Facebook					
<b>10.</b>	I do have arguments with friends on Facebook about Federalism					
<b>11.</b>	I believe that my friends (on Facebook) sharing the same opinion as mines about Federalism?					
<b>12.</b>	Even when my opinion is in minority I feel comfortable when writing or sharing posts that support my opinion about federalism					
<b>13.</b>	I believe most Libyan Facebook pages are in favor of federalism					
<b>14.</b>	I believe that information about federalism on Facebook are mostly false					
<b>15.</b>	I prefer Facebook more than TV to follow news					



**16. How much time do you spend on Facebook per day?**

- a) 1 hour or less      b) 2 hours      c) 3 hours      d) 4 hours  
e) 5 hours or more      f) Other (please specify)

		Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
17.	I watch TV channels that entertain me					
18.	I watch TV channels that educate me					
19.	I watch TV channels that inform me					
20.	I watch TV channels that support my political opinion					
21.	I watch TV channels that support different views than mine					
22.	I do have arguments with my friends (in real world) about Federalism?					
23.	I believe my friends (in real world) have the same opinion as mine about Federalism					
24.	I do have arguments with strangers about Federalism in my daily life					
25.	I feel comfortable when speaking out my opinion about federalism with strangers even when my opinion is in minority					
26.	I'm interested with federalism debate on TV					
27.	I believe that most Libyan TV channels are in favor of federalism					
28.	I believe that information about federalism on TV are mostly false					
29.	I believe it is better for Libya to be a Federal state					
30.	I and my friends are coming from the same region					
31.	My friends are coming from different region than me					
32.	I prefer TV more than Facebook to follow news					

**33. How many hours a day do you watch TV?**

- a) 1 hour or less                      b) 2 hours                      c) 3 hours  
d) 4 hours                      e) 5 hours or more                      f) Other (please specify)

**34. What kind of TV program do you like to watch on TV?**

- a) Entertainment      b) Sports      c) News      d) Documentaries      e) other  
(please specify) .....

**35. Please indicate your gender.**

- a) Male                      b) Female

**36. What is your age?**

- a) Younger than 20 years                      b) 21 – 25 years                      c) 26 – 30 years  
d) 31 – 40 years                      e) Older than 40 (please specify) .....

**37. What is your education?**

- a) Undergraduate                      b) Associate degree                      c) Graduate  
d) Postgraduate                      e) Others (please specify).....

**38. What is your region?**

- a) Cyrenaica                      b) Tripolitania                      c) Others (please specify).....

**39. Which Media outlet are you most familiar with?**

- a) TV                      b) News Papers                      c) Social Media                      d) Other (please specify).....

**40. Do you have a user profile in Facebook**

- a) Yes                      b) No

**a) Do you have a user profile in YouTube**

- a) Yes                      b) No

**b) Do you have a user profile in Twitter**

- a) Yes                      b) No

**c) Do you have a user profile in Instagram**

- a) Yes                      b) No

**d) Other (please specify) .....**

## Appendix B: Filtering Data According of Hypothesis Test By Excel Software

Table B1: Entering data by Excel Software

	Q35	Q36	Q37	Q38	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q39	Q40	Q41	Q42	Q43	
1	A	A	A	A	5	3	4	5	4	4	4	4	4	4	3	4	3	3	4	D	3	3	3	3	3	4	4	4	4	3	2	4	5	3	3	2	A	A	C	A	B	B	B	
2	A	C	A	A	5	4	1	4	5	1	4	4	4	4	4	4	3	4	3	C	2	2	2	2	2	2	3	4	4	2	3	3	5	4	2	1	A	A	C	A	B	B	A	
3	A	C	A	A	5	5	2	5	5	2	5	5	5	5	3	4	4	3	5	C	1	1	1	1	3	4	3	4	3	3	2	5	5	3	3	1	A	A	C	A	B	A	A	
4	A	B	A	B	5	2	5	4	4	4	4	4	4	4	4	5	4	4	3	D	2	5	4	4	4	4	4	4	4	3	4	1	4	2	3	B	C	C	A	A	B	B		
5	A	B	A	A	4	4	1	3	4	4	4	4	4	4	4	4	2	5	C	5	1	3	3	3	4	3	3	3	3	2	5	4	2	4	1	A	B	C	A	A	B	A		
6	A	B	B	A	4	3	3	4	4	3	4	4	4	4	3	4	3	3	4	D	3	3	3	3	3	3	2	3	4	1	5	4	3	3	2	B	B	C	A	A	A	A		
7	A	B	A	A	4	4	2	4	4	2	4	4	3	4	3	4	3	3	4	B	4	3	3	4	2	4	3	3	4	3	2	4	4	4	2	1	B	B	C	A	B	B	B	
8	A	B	A	A	5	4	4	4	4	3	4	4	4	4	4	5	3	3	4	C	4	4	4	4	2	4	4	5	4	2	5	5	5	2	2	B	A	C	A	B	B	B		
9	A	C	C	B	3	3	4	5	5	2	4	4	4	4	3	4	4	4	C	3	3	4	4	1	4	3	3	3	4	3	3	2	4	3	2	C	B	C	A	B	A	A		
10	A	C	C	B	3	4	2	4	3	3	4	3	3	3	3	2	4	3	3	B	4	4	4	4	2	4	4	4	4	4	2	2	2	4	2	3	C	D	C	A	A	B	B	
11	A	C	A	A	5	4	3	3	4	3	4	4	4	5	4	5	3	3	4	D	4	2	4	4	2	4	4	4	5	4	2	4	5	5	1	1	A	A	C	A	A	B	A	
12	A	B	A	A	4	3	3	4	4	4	4	4	5	5	5	4	3	5	E	2	2	2	2	2	5	4	4	5	3	1	5	5	5	1	1	A	A	C	A	B	B	B		
13	A	B	A	A	5	4	4	4	4	4	4	4	4	4	3	4	3	3	4	C	4	3	3	3	1	4	4	4	4	4	3	3	4	4	2	2	B	B	C	A	B	B	A	
14	A	C	A	A	5	3	3	4	5	3	4	4	4	4	3	4	3	2	4	C	4	3	4	4	3	4	4	4	4	4	2	4	4	2	2	B	A	C	A	A	A	A		
15	A	D	A	B	5	5	5	5	3	3	4	3	2	2	3	4	4	4	D	4	4	4	3	3	2	3	2	2	3	2	3	2	2	3	3	C	D	C	A	A	A	A		
16	A	B	A	A	5	4	4	4	4	3	3	3	3	3	3	3	2	3	C	4	3	4	4	3	3	3	3	3	3	4	2	3	4	3	3	C	B	C	A	B	A	A		
17	A	B	A	A	4	2	5	4	3	3	4	4	4	4	3	4	4	4	D	3	4	3	3	3	4	3	4	4	4	2	3	4	4	2	2	B	D	C	A	A	B	B		
18	A	C	A	B	5	5	3	3	3	3	4	3	3	3	3	3	3	4	D	4	3	3	3	3	2	3	2	3	2	3	3	2	3	3	2	B	A	C	A	B	B	A		
19	A	B	A	B	5	4	4	4	3	3	4	4	4	4	4	4	3	2	4	D	4	4	4	4	3	4	4	4	4	4	3	2	1	4	2	2	C	B	C	A	B	A	A	
20	A	C	A	B	4	4	3	4	4	4	3	4	2	2	3	2	4	4	E	4	2	2	2	2	2	2	2	2	1	2	3	3	1	2	4	2	B	B	C	A	A	A	A	
21	A	B	A	B	5	3	3	4	4	4	3	4	2	2	2	2	3	3	E	3	3	3	3	3	2	2	2	2	2	2	3	3	2	2	4	3	C	C	A	B	A	A		
22	A	B	A	B	5	5	4	4	3	3	3	3	2	2	2	1	5	5	E	5	4	3	3	3	2	2	2	1	3	3	4	2	2	4	2	B	A	C	A	B	B	A		
23	A	B	A	A	4	5	3	4	3	3	4	4	4	3	3	3	3	4	B	4	3	3	3	1	3	3	3	3	3	4	2	2	4	3	3	2	C	A	C	A	B	B	A	
24	A	C	B	A	4	3	4	4	4	2	4	4	4	4	3	4	3	4	C	4	2	4	4	2	4	4	4	4	4	4	2	5	5	4	2	2	D	C	A	B	A	B		
25	A	C	B	B	4	3	4	4	3	3	3	4	3	4	2	2	4	4	D	4	2	2	2	2	2	2	2	2	2	2	3	2	3	4	2	2	B	A	C	A	B	B	B	
26	A	B	A	A	5	5	3	5	4	3	3	4	4	4	4	5	4	2	5	D	4	2	2	3	2	4	4	3	4	3	2	4	5	4	2	1	C	B	C	A	B	B	A	
27	A	D	B	B	3	4	4	4	4	2	4	4	4	4	4	4	4	4	C	4	3	4	4	2	4	4	4	4	4	4	3	3	1	4	2	3	C	A	C	A	B	B	B	
28	A	B	A	B	4	4	4	4	4	4	3	3	3	3	3	3	3	4	D	4	2	2	3	3	2	2	2	2	2	2	2	3	3	2	3	2	B	B	C	A	A	B	B	
29	A	B	B	B	4	3	3	3	3	3	4	3	3	2	2	3	3	3	C	4	3	3	3	3	2	2	2	2	1	2	3	3	3	3	3	1	B	B	C	A	B	B	A	
30	A	B	C	B	4	1	5	4	4	4	4	4	2	3	3	3	4	4	C	2	4	2	2	2	2	2	2	2	2	2	3	3	2	3	3	2	B	D	C	A	A	A	A	
31	A	C	C	B	4	2	4	4	4	4	4	3	3	3	3	2	4	3	4	C	4	2	3	3	3	3	2	2	3	3	3	3	3	3	2	B	A	C	A	B	B	A		
32	A	A	A	A	5	4	3	5	4	3	4	4	3	4	3	4	3	3	C	5	3	4	4	3	4	3	3	2	4	3	2	4	5	3	3	1	A	B	C	A	A	B	B	
33	A	A	A	A	5	4	4	4	5	5	3	5	3	5	3	4	2	5	C	4	4	3	5	2	3	3	3	3	3	1	5	4	3	3	2	B	A	C	A	B	B	B		
34	A	A	A	A	5	5	3	5	5	3	5	5	5	5	5	4	4	4	5	D	4	3	3	3	1	5	4	4	4	1	5	5	4	1	1	B	A	C	A	B	B	A		
35	A	C	C	B	4	4	4	4	4	4	4	4	3	3	3	3	3	5	D	5	2	2	2	2	3	3	1	1	2	3	3	2	2	2	2	B	A	C	A	B	B	B		
36	A	C	C	B	4	3	3	4	4	4	3	4	3	4	3	2	4	2	4	C	4	4	2	2	2	3	3	3	2	2	3	4	3	3	2	B	D	C	A	A	B	B		
37	A	B	C	B	4	4	2	4	3	3	3	3	2	2	2	2	4	4	D	3	3	3	3	3	2	2	1	1	3	3	3	2	3	3	1	B	B	C	A	A	B	B		
38	A	C	C	B	3	4	3	4	4	3	3	3	3	3	3	3	3	2	3	B	4	2	4	4	2	4	4	3	3	4	2	2	2	3	3	D	C	A	A	B	B	B		
39	A	B	B	B	3	4	4	4	4	2	4	2	2	2	3	2	4	3	2	B	3	3	4	4	1	4	3	4	4	4	2	2	2	3	3	4	D	D	A	A	B	B	B	
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41	A	D	C	A	3	4	5	3	3	3	2	2	2	2	3	2	4	4	3	B	4	5	3	2	2	2	2	3	3	2	2	4	4	3	3	B	B	C	A	A	A	A		
42	A	D	C	A	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1	A	4	5	3	3	3	4	3	1	1	3	3	3	2	4	5	D	D	A	B	B	B	B		
43	A	B	B	B	3	4	2	3	4	2	4	3	3	3	2	3	3	3	3	B	4	2	2	3	2	2	2	2	2	2	2	3	3	3	2	4	3	C	B	C	A	B	B	A
44	A	C	C	B	3	4	2	4	4	2	4	4	4	3	3	3	3	4	4	D	4	2	4	4	2	2	2	2	3	3	2	3	3	2	3	2	B	A	C	A	B	B	A	
45	A	D	C	B	3	3	4	4	3	3	3	3	3	3	3	3	4	4	C	4	3	3	3	3	3	3	3	2	2	2	4	2	2	4	2	B	A	C	A	A	A	A		
46	A	D	C	B	3	5	5	2	2	2	4	2	2	2	3	2	3	3	C	5	2	2	2	2	2	2	2	1	2	3	3	2	2	4	2	B	B	C	A	A	A	A		
47	A	D	C	A	3	2	2	5	5	2	2	5	1	2	1	2	3	4	2	B	2	2	4	5	1	4	3	4	4	1	5	4												

	Q35	Q36	Q37	Q38	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Q30	Q31	Q32	Q33	Q34	Q39	Q40	Q41	Q42	Q43	
49	A	B	B	B	3	4	2	4	3	3	4	4	2	2	2	2	3	3	4	C	5	2	2	2	2	2	3	1	1	2	2	3	3	2	4	1	B	B	C	A	B	B	A	
50	A	B	A	B	3	4	4	4	4	4	4	4	4	3	3	3	4	5	5	C	5	3	3	3	3	3	3	3	3	3	3	2	3	3	3	2	C	A	C	A	A	A	A	
51	A	D	C	B	3	4	4	4	4	4	4	4	3	3	3	3	3	3	4	C	4	3	2	2	2	2	3	3	3	2	2	3	3	2	4	2	B	B	C	A	B	B	B	
52	A	C	C	B	3	5	4	4	4	4	1	3	3	3	3	3	3	3	4	D	4	2	2	2	2	3	2	1	2	2	3	3	2	4	2	C	B	C	A	A	B	B	B	
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54	A	D	C	O	4	4	4	4	4	2	3	3	3	3	2	4	2	4	D	4	2	2	2	2	2	2	1	1	2	2	4	2	1	5	2	C	A	C	A	B	B	B		
55	A	D	C	O	2	4	3	3	3	3	2	2	1	2	2	2	3	3	2	A	4	5	4	3	3	3	3	2	2	3	3	3	2	2	4	4	D	B	A	A	B	B	A	
56	A	D	C	A	2	2	3	4	4	2	2	4	2	2	3	2	3	2	2	A	4	4	4	4	1	3	3	2	1	4	1	5	4	4	2	4	C	C	A	A	B	B	B	
57	A	D	C	A	2	2	3	3	2	2	1	3	1	1	3	1	3	3	1	A	5	2	4	4	2	3	2	2	2	4	1	5	3	3	3	4	D	B	A	A	B	A	B	
58	A	B	A	A	2	1	1	4	3	3	2	2	2	2	3	2	3	3	1	A	4	4	4	4	4	3	3	2	2	4	2	4	4	2	4	5	D	D	A	A	B	B	B	
59	A	C	C	A	1	1	1	1	1	1	1	1	1	1	1	3	3	3	1	A	5	4	4	4	4	3	2	1	1	4	3	3	2	2	4	5	D	A	A	B	B	B		
60	A	D	C	A	2	2	2	4	3	3	2	2	2	2	3	2	3	3	2	A	4	3	4	4	2	4	3	2	2	4	2	2	4	3	3	4	C	C	A	A	B	B	B	
61	A	D	C	A	2	4	4	3	3	3	2	4	2	2	3	2	2	2	2	A	3	3	4	4	2	3	3	2	3	4	2	4	4	4	2	4	C	B	A	A	B	B	B	
62	A	C	C	B	3	4	3	3	3	3	4	3	3	2	2	3	3	4	C	4	3	3	3	3	2	2	2	2	2	2	2	3	2	3	3	2	B	B	C	A	A	B	B	
63	A	C	C	B	3	2	5	5	4	4	3	3	3	3	2	3	4	3	C	2	5	4	3	3	3	3	3	2	2	3	2	3	3	3	2	B	D	C	A	A	B	A	A	
64	A	B	A	A	3	4	4	4	4	4	4	4	3	3	3	2	3	3	B	4	3	4	4	4	4	4	4	3	4	1	4	4	4	2	3	C	B	C	A	A	B	B	B	
65	A	D	C	A	3	2	2	5	4	2	2	4	4	4	4	3	3	2	4	B	4	4	3	3	3	4	3	3	3	3	3	3	4	3	3	2	B	D	C	A	B	A	B	
66	A	C	C	A	3	4	2	2	2	2	2	2	2	2	3	2	3	3	3	B	5	2	2	2	2	2	3	3	2	2	3	3	3	3	3	3	C	A	A	A	A	B	B	
67	A	D	C	A	2	2	2	3	3	3	2	3	2	2	3	2	4	3	2	B	4	2	4	4	2	3	3	2	2	4	2	4	4	3	3	4	C	B	A	A	B	B	A	
68	A	D	C	B	2	4	2	2	2	1	1	2	2	2	2	2	2	3	1	A	4	4	4	4	1	4	3	4	4	4	2	3	1	4	2	4	D	D	A	A	B	B	B	
69	A	D	B	B	2	1	3	4	3	3	3	4	4	4	3	3	4	4	3	B	4	2	4	4	2	4	2	3	3	4	3	3	2	3	3	3	C	A	A	A	B	B	A	
70	A	C	C	B	2	4	2	2	2	2	2	2	2	2	3	4	3	4	2	B	4	2	4	4	3	3	3	3	3	4	2	2	4	2	4	2	C	A	A	A	A	B	B	
71	A	D	C	A	2	3	5	4	4	1	1	3	2	2	3	3	3	4	3	B	3	5	4	4	4	4	4	3	3	4	3	3	1	2	4	3	C	D	A	A	B	B	B	
72	A	D	B	A	2	2	2	4	4	1	3	4	2	2	4	2	2	3	2	B	4	3	5	5	4	3	2	2	2	4	2	2	4	4	2	4	C	C	A	A	A	B	B	
73	A	C	C	A	2	4	3	3	3	3	3	3	3	3	2	3	4	1	A	5	2	4	3	3	2	3	2	2	2	2	2	3	3	2	4	4	D	A	A	A	B	B	A	
74	A	C	C	A	2	2	4	4	3	3	2	4	2	2	2	2	2	2	2	A	3	5	4	3	3	2	2	2	2	2	3	2	4	4	3	3	4	C	D	A	A	B	B	B
75	A	D	C	A	2	4	4	2	2	2	4	2	2	2	2	3	3	3	2	B	4	4	4	4	3	2	3	2	2	3	3	4	3	3	3	4	C	B	A	A	A	A	B	
76	A	D	B	A	3	4	4	4	4	4	4	4	4	2	3	3	3	4	3	B	4	4	4	3	3	3	3	2	3	4	2	2	4	3	3	3	B	A	C	A	A	A	A	
77	A	D	B	A	3	2	2	5	5	2	3	4	2	2	2	2	2	3	4	B	2	2	4	4	2	4	3	3	4	2	4	4	4	2	2	C	C	C	A	A	B	A	B	
78	A	D	C	A	4	4	2	4	4	4	4	4	4	4	3	4	4	2	4	C	4	2	2	2	2	4	3	4	4	2	3	3	4	3	3	2	B	B	C	A	B	A	A	
79	A	B	A	A	4	4	4	4	4	4	4	5	4	3	3	3	3	2	4	C	4	4	4	4	4	4	4	4	4	3	2	4	4	4	2	2	B	B	C	A	A	A	A	
80	A	C	C	B	3	4	2	2	3	2	2	2	2	2	2	4	3	3	B	4	4	4	4	2	4	2	3	3	4	3	3	2	3	3	3	C	C	A	A	B	B	B		
81	A	D	C	A	3	4	4	3	4	2	4	3	3	2	2	2	2	3	B	4	4	2	2	2	4	2	2	2	2	3	3	4	3	3	3	C	B	A	A	B	B	B		
82	A	D	C	A	3	4	4	2	2	2	2	3	2	2	2	3	4	3	3	B	4	4	4	4	3	3	2	2	3	3	3	3	3	3	3	C	D	A	A	B	B	B		
83	A	D	C	A	2	2	1	3	3	3	2	3	2	2	3	3	2	3	2	A	4	4	2	3	3	2	3	2	3	2	2	3	2	3	4	C	B	A	A	B	A	B		
84	A	D	D	A	4	4	4	4	4	4	4	4	2	2	2	2	3	4	C	4	2	2	3	3	4	3	3	2	4	1	4	4	4	2	2	A	A	C	A	B	B	B		
85	B	C	D	A	1	1	1	1	1	1	1	1	1	1	1	1	3	3	1	A	5	2	1	1	1	2	3	1	1	1	3	3	3	4	C	A	A	B	B	B	B			
86	B	C	D	A	2	5	2	2	2	2	2	2	2	2	2	2	4	3	3	B	5	4	2	3	3	3	2	2	2	2	2	3	3	3	3	C	A	A	A	B	B	B		
87	B	D	D	B	2	4	2	2	2	2	2	2	2	2	4	4	3	3	2	A	5	2	2	3	3	3	4	2	2	2	2	2	2	4	2	4	C	A	A	A	B	B	B	
88	B	C	D	B	3	5	3	3	4	2	4	2	2	2	4	2	4	4	3	B	5	2	2	3	3	2	3	2	2	2	2	3	3	3	3	B	A	C	A	A	B	B	B	
89	B	D	D	B	2	2	4	2	2	2	2	2	2	2	4	3	3	4	2	A	1	4	4	4	4	4	4	3	3	3	2	2	1	4	2	4	C	D	A	A	B	B	B	
90	B	D	D	B	3	4	4	4	4	4	3	3	2	2	4	3	2	2	4	C	4	4	3	3	3	4	4	2	2	3	2	4	3	3	2	B	A	C	A	A	B	A	B	
91	B	B	A	A	4	4	4	4	5	2	4	4	4	4	4	4	4	2	4	D	4	2	2	4	2	4	4	4	4	3	2	4	5	4	2	2	B	A	C	A	B	B	A	
92	B	C	A	A	4	5	4	4	4	4	4	4	1	3	4	2	4	2	4	D	5	4	4	3	3	2	3	2	3	2	3	2	3	3	2	B	A	C	A	B	B	B		
93	B	C	C	A	2	4	1	1	4	4	4	2	2	2	4	2	3	4	2	B	5	2	2	4	4	4	4	1	1	2	1	5	4	3	3	4	C	A	A	A	B	B	B	
94	B	D	B	B	2	2	4	4	3	3	4	3	2	3	4	3	3	4	2	B	2	5	4	4	2	4	4	3	3	4	2	2	2	4	2	4	C	D	A	A	B	B	B	
95	B	C	D	B	3	4	4	4	4	4	4	4	2	2	3	3	3	2	3	B	4	4	3	3	3	4	4	3	2	2	2	4	2	3	B									

Table B2: Heavy Facebook users

I do believe I'm a heavy Facebook user	I prefer Facebook more than TV to follow news	How much time do you spend on Facebook per day?	I believe it is better for Libya to be a Federal state	Most familiar media outlet
1	15	16	29	39
5	4	D	5	C
5	3	C	5	C
5	5	C	5	C
5	3	D	1	C
4	5	C	4	C
4	4	D	4	C
4	4	B	4	C
5	4	C	5	C
3	4	C	2	C
3	3	B	2	C
5	4	D	5	C
4	5	E	5	C
5	4	C	4	C
5	4	C	4	C
5	4	D	2	C
5	3	C	4	C
4	4	D	4	C
5	4	D	2	C
5	4	D	1	C
4	4	E	1	C
5	3	E	2	C
5	5	E	2	C
4	4	B	4	C
4	4	C	5	C
4	4	D	4	C
5	5	D	5	C
3	3	C	1	C
4	4	D	3	C
4	4	C	3	C
4	4	C	2	C
4	4	C	3	C
5	4	C	5	C
5	5	C	4	C
5	5	D	5	C
4	5	D	2	C

Table B3: Heavy TV viewers

I prefer TV more than Facebook to follow news	How many hours a day do you watch TV?	Most familiar media outlet	I believe it is better for Libya to be a Federal state
32	33	39	29
3	D	A	2
4	D	A	2
5	D	A	3
4	C	A	4
4	D	A	1
4	D	A	2
4	C	A	4
4	D	A	3
5	D	A	4
5	D	A	2
4	C	A	4
4	C	A	4
3	C	A	3
4	C	A	4
4	D	A	1
3	C	A	2
4	C	A	2
3	C	A	1
4	C	A	4
4	D	A	3
4	C	A	4
4	C	A	3
3	C	A	2
3	C	A	4
3	C	A	3
4	C	A	2
4	C	A	3
3	C	A	3
4	C	A	2
4	C	A	1
4	C	A	4
4	C	A	2
4	C	A	2
5	C	A	1

4	4	C	4	C
4	4	D	2	C
3	4	C	3	C
3	3	B	4	C
3	3	B	3	C
3	4	D	2	C
3	4	C	2	C
3	4	C	2	C
3	4	B	2	C
3	4	C	3	C
3	5	C	3	C
3	4	C	3	C
3	4	D	2	C
4	4	D	2	C
3	4	C	2	C
3	4	C	3	C
3	3	B	4	C
3	4	B	4	C
3	3	B	4	C
3	4	B	4	C
4	4	C	4	C
4	4	C	4	C
4	4	C	4	C
3	3	B	2	C
3	4	C	3	C
4	4	D	5	C
4	4	D	2	C
3	3	B	2	C
4	4	D	2	C
3	3	B	3	C
3	3	B	4	C

H1b: Pro-federalism who are heavy TV viewers are less likely to voice their opinion than pro-federalism who are heavy Facebook users.

Table B4: Heavy Facebook & pro-federalism with participant's opinion

I do believe I'm a heavy Facebook user	I prefer Facebook more than TV to follow news	How much time do you spend on Facebook per day?	I believe it is better for Libya to be a Federal state	Most familiar media outlet	I do have arguments with my friends (in real world) about Federalism?	I do have arguments with strangers about Federalism in my daily life	I feel comfortable when speaking out my opinion about federalism with strangers even when my	Response average for (Q22,Q24,Q25)
Q1	Q15	Q16	Q29	Q39	Q22	Q24	Q25	
5	4	D	5	C	4	4	4	4
5	3	C	5	C	2	4	4	3.333
5	5	C	5	C	4	4	3	3.666
4	5	C	4	C	4	3	3	3.333
4	4	D	4	C	3	2	3	2.667
4	4	B	4	C	4	3	4	3.667
5	4	C	5	C	4	4	5	4.333
5	4	D	5	C	4	4	5	4.333
4	5	E	5	C	5	4	5	4.667
5	4	C	4	C	4	4	4	4
5	4	C	4	C	4	4	4	4
5	3	C	4	C	3	3	3	3
4	4	D	4	C	4	4	4	4
4	4	B	4	C	3	3	3	3
4	4	C	5	C	4	4	4	4
4	4	D	4	C	2	2	2	2
5	5	D	5	C	4	3	4	3.667
5	4	C	5	C	4	3	4	3.667
5	5	C	4	C	3	3	3	3
5	5	D	5	C	5	4	4	4.333
4	4	C	4	C	3	3	3	3
3	3	B	4	C	2	3	3	2.667
3	3	B	4	C	4	4	3	3.667
3	4	B	4	C	4	3	3	3.333
3	3	B	4	C	3	2	3	2.667
3	4	B	4	C	4	3	3	3.333
4	4	C	4	C	4	4	4	4
4	4	C	4	C	4	4	4	4
4	4	C	4	C	4	3	2	3
4	4	D	5	C	4	4	4	4
3	3	B	Q	C	4	3	2	3

Table B5: Heavy TV & pro-federalism with participant's opinion

I do have arguments with my friends (in real world) about Federalism?	I do have arguments with strangers about Federalism in my daily life	I feel comfortable when speaking out my opinion about federalism with strangers even when my opinion is in minority	I believe it is better for Libya to be a Federal state	I prefer TV more than Facebook to follow news	How many hours a day do you watch TV?	Most familiar media outlet	Average (Q22,Q24,Q25)
22	24	25	29	32	33	39	
4	4	3	4	4	C	A	3.667
3	2	1	4	4	C	A	2
3	2	2	4	5	D	A	2.333
4	2	2	4	4	C	A	2.667
3	2	3	4	4	C	A	2.667
3	2	2	4	4	C	A	2.333
3	2	2	4	4	C	A	2.333
2	2	2	4	4	C	A	2
4	2	2	4	3	C	A	2.667
4	1	1	4	4	C	A	2



H1c: Anti-federalism who are heavy Facebook users are less likely to voice their opinion than Anti-federalism who are heavy TV viewers.

Table B6: Heavy Facebook and Anti-federalism with users' opinion

I do believe I'm a heavy Facebook user	I prefer Facebook more than TV to follow news	How much time do you spend on Facebook per day?	I believe it is better for Libya to be a Federal state	Most familiar media outlet	I do have arguments with my friends (in real world) about Federalism?	I do have arguments with strangers about Federalism in my daily life	I feel comfortable when speaking out my opinion about federalism with strangers even when my opinion is in minority	Average (Q22,Q24,Q25)
1	15	16	29	39	22	24	25	
5	3	D	1	C	4	4	4	4
3	4	C	2	C	4	3	3	3.333
3	3	B	2	C	4	4	4	4
5	4	D	2	C	2	2	2	2
5	4	D	2	C	2	2	3	2.333
5	4	D	1	C	4	4	4	4
4	4	E	1	C	2	2	1	1.667
5	3	E	2	C	2	2	2	2
5	5	E	2	C	2	2	1	1.667
3	3	C	1	C	4	4	4	4
4	4	C	2	C	2	2	2	2
4	5	D	2	C	3	1	1	1.667
4	4	D	2	C	2	1	1	1.333
3	4	D	2	C	2	2	2	2
3	4	C	2	C	3	3	2	2.667
3	4	C	2	C	2	2	1	1.667
3	4	B	2	C	3	2	2	2.333
3	4	D	2	C	3	1	2	2
4	4	D	2	C	2	1	1	1.333333
3	4	C	2	C	2	2	2	2
3	3	B	2	C	2	2	2	2
4	4	D	2	C	2	2	2	2
3	3	B	2	C	4	3	2	3
4	4	D	2	C	3	2	2	2.333333

Table B7: Heavy TV and Anti-federalism with viewer's opinion

I do have arguments with my friends (in real world) about Federalism?	I do have arguments with strangers about Federalism in my daily life	I feel comfortable when speaking out my opinion about federalism with strangers even when my opinion is in minority	I believe it is better for Libya to be a Federal state	I prefer TV more than Facebook to follow news	How many hours a day do you watch TV?	Most familiar media outlet	Average (Q22,Q24,Q25)
22	24	25	29	32	33	39	
4	3	3	2	3	D	A	3.333333
4	4	4	2	4	D	A	4
4	3	3	1	4	D	A	3.333333
3	2	2	2	4	D	A	2.333333
3	1	1	2	5	D	A	1.666667
4	4	4	1	4	D	A	4
4	3	3	2	3	C	A	3.333333
3	3	3	2	4	C	A	3
4	3	3	1	3	C	A	3.333333
4	3	3	2	3	C	A	3.333333
3	3	2	2	4	C	A	2.666667
3	2	2	2	4	C	A	2.333333
4	3	3	1	4	C	A	3.333333
4	3	3	2	4	C	A	3.333333
3	3	3	2	4	C	A	3
4	3	3	1	5	C	A	3.333333

H2a: People from Cyrenaica region will have a more favorable opinion of Federalism than people from the outside Cyrenaica region.

Table B8: People from Cyrenaica

Region	I believe it is better for Libya to be a Federal state
Q38	Q29
A	5
A	5
A	5
A	4
A	4
A	4
A	5
A	5
A	5
A	4
A	4
A	4
A	4
A	4
A	5
A	5
A	5
A	4
A	5
A	4
A	3
A	4
A	4
A	4
A	3
A	4
A	2
A	4
A	4
A	4
A	4
A	3
A	4
A	1
A	4
A	3
A	4
A	3
A	4
A	4
A	4
A	4
A	4
A	4
A	3
A	2
A	4
A	3
A	3
A	5
A	4
A	3
A	4

Table B9: People from outside Cyrenaica

Region	I believe it is better for Libya to be a Federal state
Q38	Q29
B	1
B	2
B	2
B	2
B	2
B	1
B	1
B	2
B	2
B	4
B	1
B	3
B	3
B	2
B	3
B	2
B	4
B	2
B	2
B	2
B	3
B	3
B	2
B	2
B	2
B	3
B	3
B	3
B	2
B	1
O	2
O	2
B	2
B	3
B	1
B	2
B	2
B	2
B	2
B	2
B	2
B	2
B	1
B	3
B	2
B	2
B	2
B	2
B	2
B	2

H2b: Heavy TV viewers from the outside Cyrenaica region will have a more unfavorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya.

Table B10: Heavy TV viewers from Cyrenaica region

I prefer TV more than Facebook to follow news	How many hours a day do you watch TV?	Most familiar media outlet	I believe it is better for Libya to be a Federal state	Region
32	33	39	29	38
5	D	A	3	A
4	C	A	4	A
4	C	A	4	A
4	D	A	3	A
5	D	A	4	A
5	D	A	2	A
4	C	A	4	A
4	C	A	4	A
3	C	A	3	A
4	C	A	4	A
3	C	A	1	A
4	C	A	4	A
4	D	A	3	A
4	C	A	4	A
4	C	A	3	A
3	C	A	4	A
3	C	A	3	A
4	C	A	2	A
4	C	A	3	A
3	C	A	3	A
4	C	A	4	A

Table B11: Heavy TV viewers from outside Cyrenaica region

I prefer TV more than Facebook to follow news	How many hours a day do you watch TV?	Most familiar media outlet	I believe it is better for Libya to be a Federal state	Region
32	33	39	29	38
3	D	A	2	B
4	D	A	2	B
4	D	A	1	B
4	D	A	2	O
4	D	A	1	B
3	C	A	2	B
4	C	A	2	B
3	C	A	2	B
4	C	A	2	B
4	C	A	1	B
4	C	A	2	B
4	C	A	2	B
5	C	A	1	B

H2c: Heavy Facebook users from Cyrenaica will have a more favorable opinion of Federalism than Heavy Facebook users from the outside Cyrenaica region.

Table B12: Heavy Facebook users from Cyrenaica and their opinion with Q29

I do believe I'm a heavy Facebook user	I prefer Facebook more than TV to follow news	How much time do you spend on Facebook per day?	I believe it is better for Libya to be a Federal state	Most familiar media outlet	I do have arguments with my friends (in real world) about Federalism?	I do have arguments with strangers about Federalism in my daily life	I feel comfortable when speaking out my opinion about federalism with strangers even when my opinion is in minority	Region
1	15	16	29	39	22	24	25	38
5	4	D	5	C	4	4	4	A
5	3	C	5	C	2	4	4	A
5	5	C	5	C	4	4	3	A
4	5	C	4	C	4	3	3	A
4	4	D	4	C	3	2	3	A
4	4	B	4	C	4	3	4	A
5	4	C	5	C	4	4	5	A
5	4	D	5	C	4	4	5	A
4	5	E	5	C	5	4	5	A
5	4	C	4	C	4	4	4	A
5	4	C	4	C	4	4	4	A
5	3	C	4	C	3	3	3	A
4	4	D	4	C	4	4	4	A
4	4	B	4	C	3	3	3	A
4	4	C	5	C	4	4	4	A
5	5	D	5	C	4	3	4	A
5	4	C	5	C	4	3	4	A
5	5	C	4	C	3	3	3	A
5	5	D	5	C	5	4	4	A
3	3	B	4	C	2	3	3	A
3	3	B	4	C	4	4	3	A
3	4	B	4	C	4	3	3	A
3	3	B	4	C	3	2	3	A
3	4	B	4	C	4	3	3	A
4	4	C	4	C	4	4	4	A
4	4	C	4	C	4	4	4	A
4	4	C	4	C	4	3	2	A
4	4	D	5	C	4	4	4	A
3	3	B	3	C	3	3	2	A
3	3	B	4	C	4	3	2	A

Table B13: Heavy Facebook users from outside Cyrenaica &amp; their opinion with Q29

I do believe I'm a heavy Facebook user	I prefer Facebook more than TV to follow news	How much time do you spend on Facebook per day?	I believe it is better for Libya to be a Federal	Most familiar media outlet	I do have arguments with my friends (in real world) about Federalism?	I do have arguments with strangers about Federalism in my daily life	I feel comfortable when speaking out my opinion about federalism with strangers even when my opinion is in minority	Region
1	15	16	29	39	22	24	25	38
5	3	D	1	C	4	4	4	B
3	4	C	2	C	4	3	3	B
3	3	B	2	C	4	4	4	B
5	4	D	2	C	2	2	2	B
5	4	D	2	C	2	2	3	B
5	4	D	1	C	4	4	4	B
4	4	E	1	C	2	2	1	B
5	3	E	2	C	2	2	2	B
5	5	E	2	C	2	2	1	B
4	4	D	4	C	2	2	2	B
3	3	C	1	C	4	4	4	B
4	4	D	3	C	2	2	2	B
4	4	C	3	C	2	2	1	B
4	4	C	2	C	2	2	2	B
4	4	C	3	C	3	2	2	B
4	5	D	2	C	3	1	1	B
4	4	C	4	C	3	3	3	B
4	4	D	2	C	2	1	1	B
3	4	C	3	C	2	2	2	B
3	3	B	3	C	2	2	2	B
3	4	D	2	C	2	2	2	B
3	4	C	2	C	3	3	2	B
3	4	C	2	C	2	2	1	B
3	4	B	2	C	3	2	2	B
3	4	C	3	C	2	1	1	B
3	5	C	3	C	3	3	3	B
3	4	C	3	C	2	3	3	B
3	4	D	2	C	3	1	2	B
4	4	D	2	C	2	1	1	O
3	4	C	2	C	2	2	2	B
3	4	C	3	C	3	2	2	B
3	3	B	2	C	2	2	2	B
3	4	C	3	C	4	2	2	B
4	4	D	2	C	2	2	2	B
3	3	B	2	C	4	3	2	B
4	4	D	2	C	3	2	2	B

H2d: Heavy Facebook users from outside Cyrenaica region will have less unfavorable opinion of Federalism than Heavy TV viewers from outside Cyrenaica.

Table B14: Heavy Facebook users from outside Cyrenaica with their opinion of Federalism

I do believe I'm a heavy Facebook user	I prefer Facebook more than TV to follow news	How much time do you spend on Facebook per day?	I believe it is better for Libya to be a Federal state	Most familiar media outlet	Region
1	15	16	29	39	38
5	3	D	1	C	B
3	4	C	2	C	B
3	3	B	2	C	B
5	4	D	2	C	B
5	4	D	2	C	B
5	4	D	1	C	B
4	4	E	1	C	B
5	3	E	2	C	B
5	5	E	2	C	B
4	4	D	4	C	B
3	3	C	1	C	B
4	4	D	3	C	B
4	4	C	3	C	B
4	4	C	2	C	B
4	4	C	3	C	B
4	5	D	2	C	B
4	4	C	4	C	B
4	4	D	2	C	B
3	4	C	3	C	B
3	3	B	3	C	B
3	4	D	2	C	B
3	4	C	2	C	B
3	4	C	2	C	B
3	4	B	2	C	B
3	4	C	3	C	B
3	5	C	3	C	B
3	4	C	3	C	B
3	4	D	2	C	B
4	4	D	2	C	O
3	4	C	2	C	B
3	4	C	3	C	B
3	3	B	2	C	B
3	4	C	3	C	B
4	4	D	2	C	B
3	3	B	2	C	B
4	4	D	2	C	B

Table B15: Heavt TV viewers from outside Cyrenaica with their opinion of Fed.

<b>I prefer TV more than Facebook to follow news</b>	<b>How many hours a day do you watch TV?</b>	<b>Most familiar media outlet</b>	<b>I believe it is better for Libya to be a Federal state</b>	<b>Region</b>
<b>32</b>	<b>33</b>	<b>39</b>	<b>29</b>	<b>38</b>
3	D	A	2	B
4	D	A	2	B
4	D	A	1	B
4	D	A	2	O
4	D	A	1	B
3	C	A	2	B
4	C	A	2	B
3	C	A	2	B
4	C	A	2	B
4	C	A	1	B
4	C	A	2	B
4	C	A	2	B
5	C	A	1	B



H2f: Heavy Facebook users from Cyrenaica region will have a more favorable opinion of Federalism than Heavy TV viewers from Cyrenaica region of Libya.

Table B16: Heavy TV viewers from Cyrenaica region & their opinion of Fed. Q29.

I prefer TV more than Facebook to follow news	How many hours a day do you watch TV?	Most familiar media outlet	I believe it is better for Libya to be a Federal state	Region
32	33	39	29	38
5	D	A	3	A
4	C	A	4	A
4	C	A	4	A
4	D	A	3	A
5	D	A	4	A
5	D	A	2	A
4	C	A	4	A
4	C	A	4	A
3	C	A	3	A
4	C	A	4	A
3	C	A	1	A
4	C	A	4	A
4	D	A	3	A
4	C	A	4	A
4	C	A	3	A
3	C	A	4	A
3	C	A	3	A
4	C	A	2	A
4	C	A	3	A
3	C	A	3	A
4	C	A	4	A

Table B17: Heavy Facebook users from Cyrenaica &amp; their opinion of Fed. Q29.

I do believe I'm a heavy Facebook user	I prefer Facebook more than TV to follow news	How much time do you spend on Facebook per day?	I believe it is better for Libya to be a Federal state	Most familiar media outlet	I do have arguments with my friends (in real world) about Federalism?	I do have arguments with strangers about Federalism in my daily life	I feel comfortable when speaking out my opinion about federalism with strangers even when my opinion is in minority	Region
1	15	16	29	39	22	24	25	38
5	4	D	5	C	4	4	4	A
5	3	C	5	C	2	4	4	A
5	5	C	5	C	4	4	3	A
4	5	C	4	C	4	3	3	A
4	4	D	4	C	3	2	3	A
4	4	B	4	C	4	3	4	A
5	4	C	5	C	4	4	5	A
5	4	D	5	C	4	4	5	A
4	5	E	5	C	5	4	5	A
5	4	C	4	C	4	4	4	A
5	4	C	4	C	4	4	4	A
5	3	C	4	C	3	3	3	A
4	4	D	4	C	4	4	4	A
4	4	B	4	C	3	3	3	A
4	4	C	5	C	4	4	4	A
5	5	D	5	C	4	3	4	A
5	4	C	5	C	4	3	4	A
5	5	C	4	C	3	3	3	A
5	5	D	5	C	5	4	4	A
3	3	B	4	C	2	3	3	A
3	3	B	4	C	4	4	3	A
3	4	B	4	C	4	3	3	A
3	3	B	4	C	3	2	3	A
3	4	B	4	C	4	3	3	A
4	4	C	4	C	4	4	4	A
4	4	C	4	C	4	4	4	A
4	4	C	4	C	4	3	2	A
4	4	D	5	C	4	4	4	A
3	3	B	3	C	3	3	2	A
3	3	B	4	C	4	3	2	A

H3a: Highest levels of the spiral of silence will be recorded among:

1. Pro-federalism who are heavy TV viewers with a majority circle of friends from the outside Cyrenaica region
2. Anti-federalism who are heavy Facebook users, viewers with a majority circle of friends from Cyrenaica region.

H3b: Lowest levels of the spiral of silence will be recorded among:

1. Pro-federalism who are heavy Facebook users from Cyrenaica region with a majority circle of friends from Cyrenaica region (or Pro-federalism).
2. Anti-federalism who are heavy TV viewers from the outside Cyrenaica region with a majority circle of friends from the outside Cyrenaica region

Table B18: heavy TV, pro Fed, friends outside C with spiral levels of silence.

Region	I do have arguments with my friends (in real world) about Federalism?	I do have arguments with strangers about Federalism in my daily	I feel comfortable when speaking out my opinion about federalism with strangers even when my	I believe it is better for Libya to be a Federal state	My friends are coming from different region than me	I prefer TV more than Facebook to follow news	Most familiar media outlet	Average(Q22,24,25)
38	22	24	25	29	31	32	39	
A	4	1	1	3	4	5	A	2
A	3	2	2	3	3	4	A	2.333
A	3	2	2	4	4	5	A	2.333
A	4	2	2	4	3	4	A	2.667
A	2	3	2	3	3	3	A	2.333
A	3	2	2	4	3	4	A	2.333
A	3	2	2	4	4	4	A	2.333
A	2	2	2	3	4	4	A	2
A	2	2	2	4	3	4	A	2
A	2	2	3	3	3	4	A	2.333
A	4	2	2	4	3	3	A	2.667
A	3	2	2	3	3	3	A	2.333
A	2	1	1	3	3	4	A	1.333
A	3	2	2	3	3	3	A	2.333
A	4	1	1	4	3	4	A	2

Table B19: Heavy TV, Anti-fed. &amp; friends outside C. with levels of spiral of silence

Region	I do have arguments with my friends (in real world) about	I do have arguments with strangers about Federalism in my daily	I feel comfortable when speaking out my opinion about federalism with strangers even	I believe it is better for Libya to be a Federal state	My friends are coming from different region than	I prefer TV more than Facebook to follow news	How many hours a day do you watch TV?	Most familiar media outlet	Average(Q22,24,25)
38	22	24	25	29	31	32	33	39	
B	4	4	4	1	2	4	D	A	4
B	3	3	3	2	2	4	C	A	3
B	3	2	2	2	2	4	C	A	2.333
B	4	3	3	1	2	4	C	A	3.333
B	4	3	3	2	2	4	C	A	3.333
B	3	3	3	2	2	4	C	A	3
B	4	3	3	1	2	5	C	A	3.333

Table B20: Heavy Facebook, pro Fed &amp; friends from C with spiral level of silence.

Region	I do have arguments with my friends (in real world) about	I do have arguments with strangers about	I feel comfortable when speaking out my opinion about federalism with	I believe it is better for Libya to be a Federal state	My friends are coming from same region	I prefer TV more than Facebook to follow news	How many hours a day do you watch TV?	Most familiar media outlet	Average
38	22	24	25	29	30	32	33	39	
A	2	4	4	5	4	1	A	C	3.333
A	4	3	4	4	4	1	B	C	3.667
A	4	4	5	5	5	2	B	C	4.333
A	4	4	5	5	5	1	A	C	4.333
A	5	4	5	5	5	1	A	C	4.667
A	4	4	4	4	4	2	B	C	4
A	4	4	4	4	4	2	B	C	4
A	4	4	4	4	4	2	B	C	4
A	4	4	4	5	4	2	B	C	4
A	4	3	4	5	4	1	C	C	3.667
A	5	4	4	5	4	1	B	C	4.333
A	4	4	3	4	4	3	C	C	3.667
A	4	3	3	4	4	2	C	C	3.333
A	4	4	4	4	4	2	B	C	4
A	4	3	2	4	4	2	A	C	3
A	4	4	4	5	4	2	B	C	4

Table B21: Heavy Facebook, Anti Fed & friends from C with spiral level of silence.

Region	I do have arguments with my friends (in real world) about	I do have arguments with strangers about Federalism in my daily	I feel comfortable when speaking out my opinion about federalism with strangers even	I believe it is better for Libya to be a Federal state	My friends are coming from same region than	I prefer TV more than Facebook to follow news	Most familiar media outlet	Average
38	22	24	25	29	30	32	39	
B	2	2	1	1	2	2	C	1.667
B	2	2	2	2	2	3	C	2
B	2	2	1	2	2	2	C	1.667
B	3	3	2	2	2	2	C	2.667
B	2	2	1	2	2	2	C	1.667
B	3	1	2	2	2	2	C	2
O	2	1	1	2	1	2	C	1.333
B	3	2	2	2	2	2	C	2.333

## Appendix C: Descriptive Statistics

Table C1: Descriptive Statistic of Response for H1a

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Heavy TV viewers	34	2.6765	1.06517	.18267	2.3048	3.0481	1.00	4.00
Heavy Facebook users	66	3.2121	1.22179	.15039	2.9118	3.5125	1.00	5.00
Total	100	3.0300	1.19304	.11930	2.7933	3.2667	1.00	5.00

Table C2: Descriptive Statistic of Response for H1b

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
heavy Facebook users and pro federalism	31	3.5269	.61928	.11123	3.2997	3.7540	2.00	4.67
heavy TV viewers and pro federalism	10	2.4667	.50185	.15870	2.1077	2.8257	2.00	3.67
Total	41	3.2683	.74617	.11653	3.0328	3.5038	2.00	4.67

Table C3: Descriptive Statistic of Response for H1c

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
<b>Anti federalism &amp; heavy Facebook users</b>	24	2.3889	.86626	.17682	2.0231	2.7547	1.33	4.00
<b>Anti federalism &amp; heavy TV viewers</b>	16	3.1042	.60515	.15129	2.7817	3.4266	1.67	4.00
<b>Total</b>	40	2.6750	.84222	.13317	2.4056	2.9444	1.33	4.00

Table C4: Descriptive Statistic of Response H2a

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Cyrenaica region	51	3.9020	.85452	.11966	3.6616	4.1423	1.00	5.00
Outside Cyrenaica region	49	2.1224	.72551	.10364	1.9141	2.3308	1.00	4.00
Total	100	3.0300	1.19304	.11930	2.7933	3.2667	1.00	5.00

Table C5: ResponseH2b\_voice\_their\_opinion

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Heavy TV viewers from Cyrenaica	21	3.2857	.84515	.18443	2.9010	3.6704	1.00	4.00
Heavy TV viewers outside Cyrenaica	13	1.6923	.48038	.13323	1.4020	1.9826	1.00	2.00
Total	34	2.6765	1.06517	.18267	2.3048	3.0481	1.00	4.00

Table C6: Descriptive Statistic of Response for H2C

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Heavy Facebook users from Cyrenaica	30	4.3333	.54667	.09981	4.1292	4.5375	3.00	5.00
Heavy Facebook users outside Cyrenaica	36	2.2778	.74108	.12351	2.0270	2.5285	1.00	4.00
Total	66	3.2121	1.22179	.15039	2.9118	3.5125	1.00	5.00



Table C7: Descriptive Statistic of Response for H2d

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Heavy Facebook users outside Cyrenaica	36	2.2778	.74108	.12351	2.0270	2.5285	1.00	4.00
Heavy TV viewers outside Cyrenaica	13	1.6923	.48038	.13323	1.4020	1.9826	1.00	2.00
Total	49	2.1224	.72551	.10364	1.9141	2.3308	1.00	4.00

Table C8: Descriptive Statistic of Response for H2f

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Heavy facebook users from Cyrenaica	30	4.3333	.54667	.09981	4.1292	4.5375	3.00	5.00
Heavy TV viewers from Cyrenaica	21	3.2857	.84515	.18443	2.9010	3.6704	1.00	4.00
Total	51	3.9020	.85452	.11966	3.6616	4.1423	1.00	5.00

Table C9: Descriptive Statistic of Response for H3a and H3b

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min.	Max.
					Lower Bound	Upper Bound		
Pro- federalism, heavy Tv viewers & majority of friends from outside Cyrenaica	15	2.2222	.32530	.08399	2.0421	2.4024	1.33	2.67
Anti- federalism, heavy Facebook users, majority of friends from Cyrenaica	8	1.9167	.42725	.15105	1.5595	2.2739	1.33	2.67
Pro federalism, heavy Facebook users from Cyrenaica & friends from Cyrenaica	16	3.8958	.43408	.10852	3.6645	4.1271	3.00	4.67
Anti federalism, heavy TV viewers viewers outside Cyrenaica & friends outside C	7	3.1905	.50395	.19048	2.7244	3.6566	2.33	4.00
Total	46	2.8986	.92127	.13583	2.6250	3.1721	1.33	4.67