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Issue salience of Facebook users in Egypt: an agenda-setting experiment

Mark Visonà

THESIS DEFENSE

Student Full Name: Mark Visonà

Student ID: 900078202

Thesis Title: Issue Salience of Facebook Users in Egypt: An Agenda-Setting Experiment

This thesis has been successfully defended.

Thesis Supervisor:
Name: Dr. Kevin Keenan
Title: Associate Professor
Department: Journalism and Mass Communication
Institution: American University in Cairo
Signature: Kevin Keenan Date: 4/29/2012

First Reader:
Name: Assoc. Professor Mervat Abou Oaf
Title: Associate Professor of Practice and Chair
Department: Journalism and Mass Communication
Institution: American University in Cairo
Signature: M Abou Oaf Date: 4/29/2012

Second reader:
Name: Dr. Naila Hamdy
Title: Assistant Professor
Department: Journalism and Mass Communication
Institution: American University in Cairo
Signature: Date: 4/29/2012

Department Chair:
Name: Assoc. Professor Mervat Abou Oaf
Title: Associate Professor of Practice and Chair
Signature: Date: 4/29/2012

Dean:
Name: Ambassador Nabil Fahmy
Title: Dean of School of Global Affairs and Public Policy
Signature: Date:

The American University in Cairo

School of Global Affairs and Public Policy

Issue Salience of Facebook Users in Egypt: An Agenda-Setting Experiment

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Abstract

This study explores issue salience among Egyptian Facebook users during the parliamentary elections of December 2011. The researcher examines the potential of agenda-setting effects occurring from the use of social media as an information source. In this study, a field experiment with a pretest/posttest design was conducted on 71 undergraduates of the American University in Cairo. Participants were assigned to treatment groups, some of which were exposed to media concerning the issue of ignorance/illiteracy in Egypt. This exposure was an attempt to increase the salience of the issue for Facebook users. The study also examined the relationship between demographic factors and issue salience in order to rule out confounding variables affecting the results. Few statistically significant results were found yet the presence of issue-related media did raise the issue salience for participants in the treatment groups. Some demographic factors were found to be associated with issue salience, and the conclusions recommend stratifying treatment groups. The data suggest that further investigation into agenda-setting and social media is warranted, and the study identifies several potential areas and avenues for future research.

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CHAPTER ONE - Introduction

While social media did not cause the Egyptian revolution, the flood of instant information from social media users caused the first whispers of revolution to explode into the national and international conversation. But how did Facebook and Twitter act as a "catalyst" for the revolution (Griffin, 2011)? The group Reporters Without Borders claims that without social networks, the case of Khaled Said, an Egyptian blogger beaten to death by police, would not have become a news story and a cornerstone of the Arab Spring (Internet Enemies Report, 2012). The ability of social networks and the Internet to escape censorship and rapidly disseminate political information was not lost on the Egyptian government, which shut down access to the entire Internet for five days in January 2011 (Kelly and Cook, 2011). As more Egyptians come online, the traditional authoritarian media system in Egypt is increasingly challenged and further eroded. The key to understanding this transition lies in examining how Egyptians interact with social media, and how this social media in turn affects Egyptian users.

Even before the revolution, Egypt was a fertile ground for the spread of social media. Egypt has over fifty percent of the population under 25 years of age, and many in this "net generation" embraced social media, with nearly five million Facebook users in early 2011 (Ghannam, 2011). As early as 2008, Egyptian activist groups on Facebook successfully called for demonstrations against the government's economic policies on the 6th of April and 4th of May (Al Ezzi et al., 2008). This tradition of online activism calling for offline change continues in Egypt, with efforts to help slum-dwellers repair roads (IRIN, 2011) and obtain national identity cards for women (WNN, 2012). The surge in number of social media users since the revolution

has also led to an increased awareness of the importance of this media in Egypt. Shortly after the resignation of President Mubarak, the ruling Supreme Council of the Armed Forces launched a Facebook page to better interact with the online community. Politicians from all parties have also harnessed social media as platforms for major announcements, like parliamentarian Mona Makram Ebeid, who tweeted (announced on Twitter) that she was resigning from the constitutional assembly (El Gundy, 2012). Increasingly, social media in Egypt have become a crucial tool for navigating and evaluating the flow of information in the country.

Statement of Problem

Throughout the Egyptian revolution, and in the year following, social media has provided "an instant depiction of unfolding events" in Egypt to both national and international users (Wazir, 2012). While much has been written on the perceived importance of social media in creating change in Egypt, relatively few studies have examined the direct influence on users of the information on these social media websites. No studies have yet examined the relationship between the issue agendas of Egyptian Facebook users and the information present on the individual Facebook pages of these users. Does Facebook play a large role in how Egyptians rate information? This researcher chose to study this interaction during the parliamentary elections of December 2011, a time of both political development and unrest in Egypt. These conditions were thought to provide unique conditions for studying how Egyptian youth have adapted to the social media environment in the wake of the Egyptian revolution. This study seeks to reveal the agenda-setting ability of social media in such conditions. In order to achieve this, a field experiment was conducted

on 71 undergraduates at the American University in Cairo from the 14th to the 18th of December, 2011.

CHAPTER TWO - Theoretical Framework

History of Agenda Setting

In the 1922 classic *Public Opinion*, Walter Lippmann first postulated that mass media (and news media in particular) "determine our cognitive maps of the world" (McCombs, 2004). While Lippmann did not coin the term "agenda-setting" nor provide empirical evidence for this process, his thesis serves as the starting point for much of the research on the effects of mass media on public opinion. In his first chapter, Lippmann (1922) uses anecdotal evidence to claim that "what each man does is based not on direct and certain knowledge, but on pictures made by himself or given to him". These pictures create a mental "pseudo-environment" that serves to "reconstruct" the complexity of reality into a "simpler model" for comprehending the world. According to Lippmann, when the "unseen facts" are misrepresented or distorted by the press, the organization of public opinion becomes "defective". In other words, when reality is determined by other sources rather than direct experience, this reality is susceptible to manipulation, as by the press in his example. Thus, Lippmann here theorizes that mass media do indeed shape public opinion, one of the key principles in agenda-setting theory.

Many empirical studies in the early and middle twentieth century demonstrated that the mass media had limited "effects on attitudes and opinions" (McCombs, 2004). Lazarfeld et. al (1948) conducted election studies that determined that the media did not play a large role in affecting decision making. The Two-Step Flow theory resulted from this study, theorizing that information flowed in a two-step flow "from the mass media, to opinion leaders, and then from them to their less-

interested peers" (Smith, 2001). While these studies found "little evidence of mass communication effects" on behavior, they did find "considerable evidence that people acquired information from the mass media" (McCombs, 2004). As a result, some scholars pursued Lippmann's thesis and challenged the dominant paradigm of the prevailing theory of minimal media effects. A political scientist, Bernard Cohen, first expressed the central tenet that underlies agenda-setting theory:

> The press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about (Dearing & Rogers, 1996).

In 1972, Donald Shaw and Maxwell McCombs built upon these concepts and published a landmark empirical study in which the term "agenda-setting" was first coined (McCombs, 2004). In this article, now known as the Chapel Hill study, the authors examined the opinions of undecided voters in the 1968 US presidential election and the content of the news media used by these voters. The study tested the hypothesis that "issues emphasized in the news" would "come to be regarded over time as important by the public", with the media agenda setting the public agenda (McCombs, 2004). The results of the survey revealed "a high rank-order correlation of +.98" between the salience of "issues on the media agenda and their corresponding salience on the public agenda" (Dearing & Rogers, 1996). The results of this study validated the original agenda-setting hypothesis of the Chapel Hill study:

> The mass media set the agenda of issues for a political campaign by influencing the salience of issues among voters (McCombs, 2004).

This hypothesis has been expanded outside the political realm to include the agenda of public opinion during "non-election periods" – theorizing that the mass media set the agenda of issues for media users by influencing the salience of these issues

(McCombs, 2004). Therefore, this study laid the groundwork for agenda-setting theory, validating the hypothesis that the media has a powerful yet "indirect" effect on public attitudes (McCombs, 2004).

Psychological Basis for Agenda-Setting

Since the 1972 study, scholars have examined both the causes and effects of the phenomenon of agenda-setting. According to McCombs (2004), the process of agenda- setting occurs due to the human psychological "need for orientation", an "explanation for the transfer of salience from the media agenda to the public agenda". As Lippmann observed, human beings construct cognitive maps to navigate the vast sensory influx of information found in everyday life. These cognitive maps in turn strive to create meaning from information via models. A need for orientation occurs depending on the information's "relevance" to an individual and their degree of "uncertainty" concerning the information (McCombs, 2004). A high need for orientation results when an individual is faced with a situation that affects them personally ("highly relevant") and also lacks information about the situation – a high level of "uncertainty" (McCombs, 2004). When people experience a high need for orientation, there is a "comparatively high agenda-setting impact of the news media" (Matthes, 2005). As a result, this concept has been often cited as the main psychological factor leading to agenda-setting effects. Zucker (1979) further refined these factors by classifying issues as either "obtrusive" or "unobtrusive" - the degree to which issues are experienced personally. In this examination, issue agendas of people are more easily shifted for unobtrusive issues, those that people have not directly experienced. Recent research has further examined the need for orientation

towards “issues”, “facts”, and “journalistic evaluations”, as well as compared the relative influences of uncertainty and relevance in this process (Matthes, 2005).

Despite evidence supporting the need for orientation as the psychological process underlying the agenda-setting effect, other scholars have proposed an “accessibility bias” as the cause of agenda-setting (Iyengar, 1990). This hypothesis focuses on information retrieval from memory as the main factor in attitude change:

> Information that can be more easily retrieved from memory tends to dominate judgments, opinions and decisions, and that in the area of public affairs, more accessible information is information that is more frequently or more recently conveyed by the media (Iyengar, 1990).

Like the need for orientation, this psychological model also views cognitive capacity as limited, in this case by information retrieval rather than perception. Attitude change occurs when the “amount of thought” about an object increases, as “the greater the amount of thought”, the stronger an attitude becomes (Moon, 2009). This model theorizes that memory is composed of” nodes” of information that are linked together (Holbrook & Hill, 2005). When one node is activated, the likelihood of “all other nodes linked to that node” becoming activated increases – and the related information becomes more “accessible” in a process known as “spreading activation” (Holbrook & Hill, 2005). A bias results when individuals select the information “that happens to be more conveniently ‘located’ or accessible” in memory when weighing a choice or opinion (Iyengar, 1990). Thus, while the need for orientation approach views needful cognitive constructs as supporting agenda-setting effects, the accessibility bias approach considers the connectedness of these constructs as the cause of these effects.

Theoretical Developments

The process of agenda-setting takes place as a result of a transfer of "salience" or "the degree to which an issue on the agenda is perceived as relatively important" (Dearing & Rogers, 1996). Usually, this measure of salience is determined for the public through surveying methods and for the media by the number of news stories on a particular issue (Dearing & Rogers, 1996). As of 2004, there were "more than 400 empirical studies" examining agenda-setting, focusing on public opinion and "specific content" in the mass media (McCombs, 2004). Many early studies in agenda-setting focused on the salience of issues or "objects", "the thing about which we have an attitude or opinion" (McCombs, 2004). Over time, McCombs and other scholars refined the theory to include the transmission of "attitude salience" concerning the aspects of a particular issue (McCombs, 2004). Weaver et. al (1981) examined the issues of the 1976 presidential election along with the election coverage of a major newspaper and voters' "descriptions" of the candidates. Through codifying these descriptions, the researchers were able to isolate "different traits" of the candidates in both the public and media agendas (McCombs, 2004). This study led to the theorizing of second level or attribute agenda-setting – the media causing a change in salience of an issue's characteristics or elements. In McComb's typology, while first level agenda-setting is concerned with "opinion strength", the second level is concerned with "opinion direction" (Lee, 2010). At this second level, researchers can better understand how "the news media shape public opinion" by studying the process of agenda-setting in greater detail (McCombs, 2004). The study of object attributes more closely examines this process by allowing scholars to eliminate any elements that may be suppressing or amplifying an agenda-setting effect.

Scholars have also expanded the study of agenda-setting effects to include the phenomena of framing and priming in news media. Framing occurs when "contextual clues" provided by the media – "subtle alterations in the statement or presentation of judgment and choice problems" – result in decision change (Iyengar, 1991). In other words, the media "frames" issues when it highlights certain aspects of a "phenomenon at the expense of others" that suggest a "particular way of thinking about the phenomenon in question" (Jaspaert et. al, 2011). Through the use of frames, the news media can alter an individual's agenda hierarchy by merely presenting information in a particular way. An example of framing would be the different approaches to the same news story by two media outlets from different cultures. While one news outlet may depict the news story of a terrorist act in the cultural framework of the United States' War on Terror in a "good versus evil" frame, the other may frame the story from a local political perspective highlighting elements of a "political injustice" frame. At the second level of agenda-setting, framing is "the selection of – and emphasis upon – particular attributes for the media agenda when talking about an object" (McCombs, 2004). In the prior example, while one news outlet would highlight story aspects such as the roles of the army and terrorists, the other may highlight aspects such as local economic conditions. In addition to framing, the phenomenon of priming affects how individuals evaluate issues. Priming may be defined as "the effects of a prior context on the interpretation and retrieval of information" (Dearing & Rogers, 1996). A priming effect results from the psychological practice of "selective attention", in which "salient" bits of information are used to make judgments to ease the decision making process (McCombs, 2004). By affecting the salience of issues, the mass media thus may have a strong indirect effect on political judgments:

> By calling attention to some matters while ignoring others, television news influences the standards by which governments, presidents, policies, and candidates for public office are judged (Iyengar & Kinder, 1987).

Both framing and priming have been examined through the experimental approach, as will be outlined below. The results of this experimental research indicate that the "power" of mass media lies in "commanding the public's attention" and "defining criteria underlying the public's judgments (priming)" (Iyengar & Kinder, 1987). Overall, the study of these two phenomena serves to better define agenda-setting effects and their influence on public opinion.

Research Traditions

While the 1972 Chapel Hill study concentrated only on the agendas of the media and the public, Dearing and Roberts (1996) identify three areas for agenda-setting study: the media, public, and policy agendas. Together with "real-world indicators", these three areas are examined through a particular measurement to determine the comparative salience of an issue relative to other agendas (Dearing & Rogers, 1996). The media agenda is measured usually via the "number of media messages" devoted to a particular issue, which vary by medium (such as column space in newspapers and story length on television) (Dearing & Rogers, 1996). The media agenda is also concerned with the impact of particular media outlets on other media agendas, such as Sweetser et. al (2008) comparing television and blog agendas during the 2004 presidential elections. The public agenda is measured by "public opinion surveys" that usually include a question on the most pressing problem facing a country at that moment (Dearing & Rogers, 1996). This public agenda does not

represent that of individuals, but is more of an aggregate measure of general public opinion concerning particular issues. Finally, the governmental or "policy" agenda is measured by the number of "policy actions" such as the passing of laws or the "amount of time given to debate of an issue" by a governing body such as the US Congress (Dearing & Rogers, 1996). This policy agenda can also be defined as the agenda of political candidates and lawmakers of a particular political orientation, such as of Republicans in the US House of Representatives. A study by Berger (2001) examining corporate lobbying and political action during the 1990's NAFTA debates found an interconnected relationship between the policy and media agendas:

> Issue salience on the corporate agenda preceded salience on the policy agenda, which preceded salience on media and public agendas for WIA, product liability, and NAFTA.

Tan and Weaver (2009) further found a "moderate and positive relationship between the newspaper agenda and the public agenda in five U.S. states" through examining legislation and media content. However, these studies have provided mixed evidence as to which direction agenda-setting occurs between public and policy agendas. McCombs (2004) identifies four research perspectives that examine these agendas, known as the Acapulco typology (named after an International Communication Association presentation in Acapulco, Mexico). The first perspective or "competition" perspective measures the entire agenda and "uses aggregate measures of the population" in examining issue salience, such as the Chapel Hill study (McCombs, 2004). The second, or "automaton" perspective, measures an individual's ranking of the entire agenda of issues in comparison with the media (usually with little correlation) (McCombs, 2004). The third or "natural history" perspective focuses on a single issue on the agenda while using aggregate measures of the

population – the public agenda – to determine an issue's salience over time (McCombs, 2004). The final "cognitive portrait" perspective also focuses on the salience of a single issue but within an individual, as opposed to an aggregate population measure (McCombs, 2004). In this research perspective, experimenters manipulate the media agenda to shift an individual's ranking of issues, such as the study by Iyengar and Kinder (1987) manipulating television news. Through this typology, researchers have been able to better observe both how and why agenda-setting occurs across media, public, and policy agendas.

The theory of agenda setting has remained viable in large part due to the many replicated studies worldwide. McCombs (2004) cites electoral research in Japan and Argentina comparing public agendas and media coverage as yielding "significant agenda-setting effects". Examinations of the German press have also demonstrated agenda-setting effects, such as the manufacturing of a fuel crisis by the media in the 1970's (Kepplinger & Roth, 1979). Many "field studies conducted around the world" have replicated the McCombs and Shaw 1972 study, corroborating "a cause and effect relationship between the media agenda and the public agenda" (McCombs, 2004). International research has developed and expanded agenda-setting theory, such as recent Korean research on inter-media agenda-setting effects (Lee, 2005 and Lim, 2011). Longitudinal studies such as an examination of governmental smoking policies in Japan have also examined the efficacy of agenda-setting effects over time (Sato, 2003). However, the bulk of agenda-setting research has been conducted in Western countries, though research from East Asia is increasingly appearing. The worldwide surge in agenda-setting related research has resulted in several related areas of study in communication theory. These related areas include inter-media

agenda-setting, “propaganda analysis”, “entertainment-education”, “media advocacy”, and “media gatekeeping” (Dearing & Rogers, 1996).

CHAPTER THREE - Literature Review

The Internet and Agenda Setting

With the introduction of the worldwide web and web browsers in the early 1990's, the Internet opened up as a new medium for communication. Websites first functioned in the same ways as traditional media, in that information flowed from one source to many receivers. However, in the last twenty years, the Internet has been transformed as a medium, for the flow of information has shifted to a many-sources-to-many-receivers approach. As opposed to traditional print media such as books or newspapers, the Internet allows users to input nearly instantaneous feedback, resulting in more active audiences for media messages. When a new technology develops on the Internet,

> diverse grassroots communities begin to tinker with it, expanding its functionality, hacking its code, and pushing it into a more participatory direction (Jenkins, 2006).

Due to this participatory nature, the Internet provides several areas of interest for the theory of agenda-setting. Firstly, the Internet serves as a revolutionary tool for measuring public opinion both at the national and international level. In the early 1990s, the Internet merely provided media access to diverse groups of people, much like the telephone or satellite television. However, the participation of its users today allows scholars to analyze user-produced content and thus determine public opinion of certain subsets of the population. By studying the opinions expressed online, scholars can examine how traditional media affect the agendas of Internet users. Dwzo, Wanta, and Roberts (2002) began to examine these opinions by studying

"electronic bulletin boards" (EBB's) as "open forums for discussion on a wide variety of topics". This study examined the effect of traditional news source coverage on these online discussions, concluding that major media sources such as the *New York Times*, Associated Press, and CNN "can provide individuals with information to use in their Internet discussions" (Dwzo, Wanta, & Roberts, 2002). Lee et. al (2005) also found inter-media effects between EBB's and newspapers as "Internet discussion of issues was prompted by media coverage" during a 2000 general election in Korea. In an effort to determine how mainstream media effects the agendas of Internet users, some scholars have compared media content with public salience as expressed through online searches. A study by Jeong (2008) examined media coverage of Brittany Spears and web searches, suggesting "that traditional media lead Internet searches". This impact on Internet searches has also been researched in a study by Aikat (2005) on searches after media coverage of the events of September 11, 2001. Through this information, researchers further demonstrated the casual effect of media sources setting the agenda of Internet users. Secondly, the Internet serves as a platform for new and emerging kinds of news media, with a 2005 survey by the Newspaper Association of America finding that "36% of 18 to 29 year olds now use the Internet as their primary news source" (Ozakca et. al., 2006). By studying the content of media such as Youtube videos, social networks, and online newspapers, scholars can determine what agenda-setting effects, if any, these media may cause in Internet users.

Internet Users and Agenda Setting

A persistent criticism of the Internet and its influence has been the lack of universal access to the medium by audiences worldwide (or at least access comparable to that of television and newspapers). This phenomenon has been called the "digital divide":

> The gap between the more privileged who have access and the less privileged who do not have access to information and communication technology (ICT)…the "haves" and "have-nots" of Internet access (Huang & Chen, 2010).

The digital divide refers not only to socioeconomic groups, but to generational gaps in access to Internet technology as well. Young adults may be more accepting of new developments on the Internet and correspondingly interact with the medium more frequently than older generations. One study of American college student behavior found that "heavy users" would be on the Internet from 4 to 16 hours a day (Ozakca et al., 2006). This study of student behavior found that students used the Internet "extensively for news and information, health information, downloading of software and entertainment and blogging" (Ozakca et al., 2006). Young people may be drawn to a diversity of "news sources" consisting of "non-traditional media" on the Internet that do a better job of "reporting the issues important to them" (McCombs, 2007). As these numerous sources exist online, one view sees increasing numbers of "many more agendas now, all easily available online and in alternative media popular with the young" (McCombs, 2007). An exploratory experiment by Conway and Patterson (2008) determined that Internet users of a news website recalled a diversity of stories instead of journalist-determined top stories in a process of "news personalization". This rise in "niche media" that cater to particular subsets of the population should thus theoretically decrease the agenda-setting effect (Kook Lee, 2010).

Despite the variety of agendas available online, another perspective sees Internet news sites as mostly "subsidiaries of traditional media" that expose "even the young" to the "main issues of mainstream society and media" (McCombs, 2007). A study by Kook Lee (2010) also demonstrated that even accidental or "incidental" exposure to news sources online "significantly contributes to people's learning of important issues to think about". In other words, this study suggested that even information acquired superficially online could influence public opinion, as the "length of time spent on reading news stories contributes to perception of issue importance" (Kook Lee, 2010). Under experimental conditions, a different study by Lee (2010) also discovered first and second level agenda-setting effects "and priming effects" occurring "together" in subjects exposed to modified online newspapers. In this study, experimental subjects were primed by levels of exposure to environmental issues that led to belief change, indicating "attribute salience transfer is highly associated with priming effects" (Lee, 2010). Schmitz Weiss and Tremayne (2009) conducted an experiment with headline appearance in online newspapers, finding evidence of agenda-setting regardless of headline format as a result of exposure to the news website. While a variety of Internet news sources have produced agenda-setting effects under experimentation, relatively few studies have concentrated on social media as news sources. As Internet access becomes increasingly "socially valuable" worldwide, determining the impact of these news sources on Internet users is key to understanding both the scope and influence of this medium as a whole (Howard, Busch, & Sheets, 2010).

Inter-media Agenda-Setting and the Internet

Research on inter-media agenda-setting effects has traditionally focused on the "substantial influence" that certain types of "elite" news media yield over other news media (McCombs, 2007). Inter-media agenda setting occurs when these news sources set the agenda of other media, such as other newspapers and television stations (news "gatekeepers") taking story cues from the front page of *The New York Times* (Sweetser, Golan, & Wanta, 2008). Studies have shown that by determining the "newsworthiness" of stories for other media, *The New York Times* has raised the prominence of such issues as "radon gas", "the toxicological disaster at Love Canal", and "the War on Drugs" (Dearing & Roberts, 1996). Inter-media agenda setting effects have been discovered in studies comparing newspapers, wire services, television news, and "political advertising" (McCombs, 2007). With the proliferation of new kinds of news sources on the Internet, scholars have attempted to measure the influence, if any, of both traditional and non-traditional media on these virtual news media. The studies following this research approach can be classified into two categories: studies that examine the influence of traditional media on Internet news sources, and studies that compare agenda setting influence between Internet news sources. In both of these categories, researchers aim to discover any inter-media agenda setting effects occurring online.

In the first category of Internet inter-media agenda setting, recent studies have investigated the relationship between online news sources and traditional news sources such as newspapers and television. Sweetser et al. (2008) compared the media agenda of major television networks with blogs and television advertisements during the 2004 US presidential election, finding "mixed support" for inter-media agenda setting. This study found evidence of a "reciprocal inter-media agenda-setting effect between blogs and broadcast television news", whereby television news was

influenced by the content of political blogs and vice versa (Sweetser, Golan, & Wanta, 2008). The results indicated that traditional media continued "to set the agenda" while blogs were found to "decrease salience time lag in regards to issues" (Sweetser, Golan, & Wanta, 2008). In other words, blogs played a complex role in the agenda-setting process by increasing issue salience more quickly than traditional forms of media. Wallsten (2007), also examining political blogs and traditional media (*New York Times*' stories) in 2004, found a "positive, bidirectional relationship between media coverage and blog discussion". In a sort of two-way agenda-setting effect, "media coverage was followed by more discussion in the blogosphere, and more discussion in the blogosphere was followed by more media coverage" (Wallsten, 2007). This study indicated that agenda "influence" may not occur in strictly one direction between Internet media and mainstream media, and that this influence tends to happen "immediately rather than after a lengthy time delay" (Wallsten, 2007).

While these findings negate the influence of agenda-setting online, they also indicate that blogs and other online media are playing a substantial role in the new media environment. However, as these studies focused primarily on well-known blogs and mainstream media sources, other kinds of Internet media may have agenda-setting effects with a clearer directional influence. Song (2007) discovered a complex relationship between the agendas of online and mainstream news sources during "massive anti-US protests" in South Korea in 2002. The study discovered an ideological inter-media agenda setting effect from "progressive" online newspapers to "conservative" print newspapers (Song, 2007). The results of Song's (2007) study indicated that the ideological differences resulted in the inter-media effects observed rather than differences in medium. However, the study also suggested that "the news

media may set agendas by competing with, rather than following, each other…according to their editorial orientations" (Song, 2007). Meraz (2009) examined blog networks and the frequency of link posting to "highlight that traditional media's agenda setting power is no longer universal or singular within citizen media outlets". The study found the "continued strength" of traditional media (the *New York Times* and the *Washington Post*) as agenda setters in these blog networks (Meraz, 2009). However, the findings of "insignificant differences in traditional to-citizen media links" showed that "traditional media agenda setting is now just one force among many competing influences" (Meraz, 2009). Therefore, these inter-media agenda-setting studies provide mixed results, for the relationship between traditional and online news media is both multidirectional and mutative.

The second series of inter-media agenda-setting studies concerning media on the Internet focuses on the relationship between news sources online. Research in this area of inter-media agenda-setting compares the relative influence of online news sources in shaping the agenda of other online sources. Ragas and Kiousis (2011) examined the inter-media effect between competing videos and "progressive news media coverage" on the Youtube video website during the 2008 US presidential election. The study compared the agendas of an offline source (the magazine *The Nation*) and two online news sources, the website MoveOn.org and Youtube advertisement videos from a contest known as "Obama in 30 seconds". A "significant" association was found between the ads created by the MoveOn.org group (created online) and "citizen-activist created" ads (Ragas & Kiousis, 2011). While this study established the presence of inter-media agenda-setting effects between "a political activist group, citizen activists, and a candidate's campaign", researchers were unable to determine the direction of the effect (Ragas & Kiousis,

2011). Nonetheless, the study determined that an inter-media effect occurred online between the various sources of political advertisements. Lim (2010) found that several online newspaper sites in South Korea "affect the way the country's online wire service covers issues and attributes". These "major" online newspapers acted at both the first and second level of inter-media agenda setting as they affected both the issues and "what attributes their competitors cover" (Lim, 2010). This study revealed that online news sources have the ability to set the agenda of various kinds of online media (both online wire services and "competitors", other online newspapers) (Lim, 2010). Furthermore, the study verified "the generalizability of inter-media agenda-setting to other countries" besides the United States (Lim, 2010). As the Internet facilitates the diffusion of multiple media types, from online newspapers to videos captured from television broadcasts, inter-media agenda-setting remains an important area of research in agenda-setting theory and the Internet.

Agenda-Setting and Social Media

The Internet has seen a revolution in technology in the last decade, with early methods of stating opinions publically such as electronic bulletin boards and blogs leading to interconnected social networks such as Facebook and MySpace. These developments have led to what is now called social media or Web 2.0:

> The rise and growth of a new type of intelligent web services which have enabled users to share, adapt and create content (Verdegem, 2011).

As mentioned above, the Internet has allowed media consumers to be more participatory in their media consumption and interaction. Internet users "increasingly *co-create, network and fragment* across multiple media channels", while "multiple,

fragmented and overlapping topics" set the media agenda (Lazaroiu, 2011). With this diversity of content and opinion these Internet media should lessen agenda-setting effects, as users should have more independent sources each with differing agendas. Theoretically, the more diverse agenda sources that people are exposed to, the less likely that one media source will disproportionately shape a person's agenda. Robinson (1976) theorizes that the flow of information and influence between "opinion givers and opinion receivers" leads to an immunity for certain individuals to media influence:

> People not involved in such social networks seem most susceptible to a one-step influence from the mass media

However, as the Internet has been found to be "a supplement, not a competitor to offline news media activities", agenda-setting effects may persist despite this online fragmentation of information (Ozakca et al., 2006). Social media technologies in particular may have an agenda-setting power that has yet to be examined by scholars.

These social networks may influence users through the variety of functions that they provide to users as these websites combine several attractive aspects of Internet technology. As a mass medium, the Internet has four main pathways of information:

> (a) one-to-one asynchronous communication (e-mail), (b) many-to-many asynchronous communication (EBBs), (c) one-to-one, one-to-few, one-to-many synchronous communication organized around a topic or object (i.e., role playing, chat rooms), and (d) asynchronous communication, which is characterized by the receiver's need for information (i.e., Web sites) (Dzwo, Wanta, & Roberts, 2002).

In category (a), information is transferred much like in traditional interpersonal communication that does not occur simultaneously, such as sending a letter in the mail. In category (b), communication occurs between many people but not instantaneously, such as a Facebook wall or letters published in a newspaper. In category (c), communication is in real time between either two or more people concerning a particular subject. The final category of (d) is merely information retrieval from websites that are not communicating in real time with a user. Social media fall into one or several of these categories depending on the website, yet nearly all popular forms include both (b) and (c). Importantly, many social media websites allow users to add links either "to news articles" or to other social media, such as "other blogs" or Twitter feeds or Youtube videos (Wallsten, 2007). This interconnectedness could have strong implications for agenda-setting theory, as a profusion of similar links could determine the agendas of social media users.

The technological characteristics of certain social media websites also may enhance agenda-setting effects. Salinas (2008) describes in depth the "underhanded form of agenda-setting that poses as audience generated interest" occurring on the Youtube website as a result of the site's "structure" of video options, as people usually choose the top result of a list. This study is noteworthy in that it presents the website's agenda-setting nature by describing the site's technology rather than by survey or experimentation. Examples include how choosing a particular Youtube video results in "a number of related videos that tend to reinforce existing values", enhancing a "subconscious" agenda-setting effect (Salina, 2008). Ragas and Kiousis (2009) empirically verified this assumption in their study of Youtube campaign videos, in that related videos were found to be positively correlated in terms of "the salience of issues". Overall, while Youtube's agenda-setting functions have begun to

be researched by scholars, more participatory social media websites such as Facebook and Twitter have yet to be examined from this perspective.

Overview of Facebook and Twitter

It is impossible to examine social networks and agenda setting without first drawing an accurate picture of the changing online news environment. Several technological developments in addition to changes in format have resulted in online news forms distinct from traditional news in newspapers and magazines or on television. A major shift in news format has occurred as Internet bandwidth has increased, facilitating video loading and posting. This has led to an explosion of video sharing, meaning that news stories now often incorporate video as well as picture and text. Videos have become so prevalent online that the phenomenon of the "viral video" has become commonplace – a video that spreads at the speed of a virus, gaining millions of views in a relatively short time. The combination of mobile phones and video technology has allowed Internet users to personalize news stories by posting cell phone videos of events without input from traditional media gatekeepers. User generated content has become a mainstay of the online news environment, with even traditional news outlets such as CNN asking for input on stories on its website (edition.cnn.com, 2011). These mainstream news outlets have become interconnected with social media, with CNN.com featuring a "Popular on Facebook" section on its homepage and offering tools such as mobile phone applications and podcasts for more user interaction. Additionally, social media websites facilitate the uploading of videos and other information such as links to other websites – creating a potentially

limitless capacity for sharing and storing information. If social media websites do affect the salience of issues, users may be unaware of any effects:

> If an individual chooses to seek out particular forms of information, it is the structure of new media that then defines his or her alternatives in the form of a top down list. There is no communications theory necessary to observe that people often click on the first thing they see. The subsequent subconscious agenda is particularly insidious (Salinas, 2008).

Other aspects besides information retrieval on social media websites may affect issue salience. Bennett and Segerberg (2011) have established that the context of "shared environments" of social networking indicates "strong levels of mutual recognition of action frames and agendas". In other words, the mere interaction of users online in social networks may reinforce agendas at both the first and second level, further contributing to any agenda-setting effects. As these social media websites become platforms for online news distribution, agenda-setting effects may be occurring as a result of this shift.

Before examining these social media sites in detail, it is necessary to provide a background on how these sites have become trusted sources of news. Several studies have explored how sites such as Facebook fulfill various needs of their users within the framework of Uses and Gratifications theory. The Uses and Gratifications approach views individuals as "goal-directed in their mass communication behavior" who choose "alternative sources" to "gratify needs or motives" (Rubin & Windhall, 1986). The Uses and Gratifications approach seems to contradict the agenda setting hypothesis, as active audiences should be able to negate the effect by choosing alternate sources of news. Nonetheless, by choosing particular mediums as news sources, the inherent agendas found within these media may result in an agenda setting effect. The issue salience of a user relying on social networking sites for

information needs may change as a result of using these sites. As the audience actively seeks to fulfill certain needs, they consume different types of media according to the specific need. In a study involving focus groups by Urista et. al. (2009), college students were found to use Facebook and MySpace for "interpersonal communication satisfaction" and to find out "current information" with "fast results". In other words, this study indicates that users of social networking sites (SNS) tend to seek out social information about other users. However, it appears that these sites are being used not only for obtaining social information, but for information that would be traditionally labeled as 'news'. The phenomenon of using social networks for information and mobilization has appeared worldwide throughout 2011, in both North America and the Middle East. An article in the *The New York Times* documented the rise in social media use in Mexico as a result of violence, for users are depending on the sites for "local survival" (Cave, 2011). This article identifies several instances of social media serving as a forum for community information about this violence known as "electronic crime-sharing" (Cave, 2011). One Mexican Twitter user describes the utility of the website:

> Declining to give her full name out of fear, she said that while she probably lives with more fear now because she is "in the know" thanks to social media, its civic role should not be undervalued. Referring to digital warnings about cartel checkpoints and shootouts, she said, "People's lives are saved with Twitter" (Cave, 2011).

As Facebook developed from a college-based networking site to a more inclusive format, new features on the site have facilitated spreading news information rather than just social information. Twitter has also implemented changes to aid transmission of information less concerned with interpersonal communication. In

other words, with these technological developments, these sites are shifting from a one on one social medium into mass media akin to traditional sources of news.

Without first considering the technological aspects of these websites, it is impossible to obtain a clear picture of the factors that may contribute to an agenda-setting effect. Upon logging in to the networking website Facebook, the user arrives at a "home page" with a continuously updating screen of "stories" about other network users or "friends". This "news feed" includes comments, photos, videos, and links posted by individuals who are connected to the user. On the right side of the home page a constantly updating sidebar shows the "status updates" of friends (usually sentiments expressed in a few sentences on the "wall", the personalized page of a Facebook user). The wall allows posts up to 5,000 words, and can include multimedia posts such as photos, videos, or links to outside websites. On the home page, the news feed displays the most recent posts to these walls as well as posts connected to the user's own activity. This aspect of the website leads to what Salinas (2008) describes as "agenda-setting that relies on the audience to determine its own agenda". When a friend posts a news link on their own wall or a friend's wall, this "story" becomes posted on the home page of their friends. Some users allow Facebook to access their online news habits, and the stories that they have read appear on their friend's news feeds. Through these posts, users may read stories that have been read by their friends, leading to a possible convergence of agendas among these users. A search for the item in the website's search bar will produce pages (websites with feedback sections) associated with that topic. The results of this search are divided into these pages, "posts by friends", and results from the web. Facebook thus displays different kinds of related results that remain similar to the search item. As Salinas (2008) mentions, since the website itself controls the "algorithm of the search

engine", Facebook becomes "the discussion medium as well as the agenda-setter", essentially defining what stories are relevant for the user. Furthermore, when friends of a user "shares" a post from another user (essentially reposting the same link, photo, video, or comment) this post appears at the top of the news feed. This highlights the interpersonal aspect of the medium, as an issue may gain salience if a user sees that acquaintances are also aware of the issue. Also, the artificial manipulation of the website's news feed further strengthens the effect, as the user may think the issue is more important since other users are sharing the same information. A new feature, the "subscribe" button, allows users to follow the posts of certain individuals much like new blog posts, automatically updating users to changes. By providing search results and notifying users when friends have posted similar stories, Facebook may be raising issue salience and thus creating an agenda-setting effect.

Similar to Facebook, the social media site Twitter posts lists of topics known as "trends" that are touted as the most discussed topics of the moment. By allowing its users to "tag" certain topics, a Twitter user can raise the prominence of a single issue by producing numerous "tweets" or posts with that issue tagged. As the website itself promotes these popular tags, the salience of an issue increases when the website identifies it as "trending". The site is organized by the use of "hashtags" (#) that identify keywords or topics in a post, and by clicking on a particular hashtag the user accesses "all other Tweets in that category" (support.twitter.com, 2011). Major news events often become trending topics, such as during the Egyptian revolution in January 2011 when #Tahrir became a worldwide topic of discussion. This aspect of the site may provide an agenda setting function as these topics affect what issues Twitter users regard as salient, because the site actively promotes these topics. Also, issue salience may change depending on which Twitter users include these topics in

their tweets, as the interpersonal influence noted on Facebook also occurs on Twitter. As more "followers" (users who follow or subscribe to a specific user's tweets) comment or "retweet" a trending topic, an issue may become more salient because of the influence of these users. Another agenda-setting function on Twitter occurs in the site's internal search engine. Much like on Facebook, a search on Twitter for a particular topic results in lists of related tweets, people, images, and video. The site also features "promoted tweets" that "share popularity and resonance among other users" as determined by an algorithm based on user interaction (support.twitter.com, 2011). However, this algorithm is not presented to users and may reflect certain biases in the system, perhaps ultimately influencing the issue agenda of Twitter users. Therefore, these technological characteristics of Twitter by themselves may be capable of an agenda-setting function.

This thesis will build on the experimental work of Lee (2010) in determining what level of agenda-setting effects result from the use of the social media website Facebook as a news source. Through these tests, this study will better illuminate the ability of social media to shape both *how* and *what* we think.

CHAPTER FOUR - Methodology

Research Design

In order to determine a causal relationship between content on the social website Facebook and the agendas of users, this study chose an experimental design to explore the issues at hand. While survey methods have been used extensively in studying the uses of social media websites, the level of causality needed to establish agenda-setting demanded a more quantitative approach. Researchers such as Schmitz Weiss and Tremayne (2008), Conway and Patterson (2008), and Kook Lee (2010) have used experimental designs to study agenda-setting online and determine the influence of Internet news media on users. This study continues the tradition of experimental testing introduced by Iyengar and Kinder (1987) and adapts several of their experimental procedures, as will be outlined below.

The subjects who participated (n=71) in this study were undergraduate students in four Mass Communication classes at the American University in Cairo. These experimental subjects were selected because they are characteristic of young and English-speaking Egyptians with access to social media. The experiment was constructed as a pre-test / post-test experimental design, with subjects randomly assigned to three treatment groups and one control group. The three treatment groups consisted of a No Exposure group (n=18), a Medium Exposure group (n=17), and a High Exposure group (n=19). The No-Facebook Control group (n=17) received no treatment other than the completing both the pre and posttest questionnaires.

Pre-test questionnaires were administered to each class with the explanation that the students would be participating in a study measuring information retention

online. The students were instructed to add the researcher on Facebook and were told to expect several posts over the next four days. The students were told to read or watch each post and write a one-sentence summary of the content. After all of the questionnaires were collected, the students who added the researcher on Facebook were randomly assigned to three treatment groups by use of dice. The students who did not add the researcher were treated as a control group receiving no treatment. The students who added the researcher were randomly divided into three treatment groups: a no-exposure group, a medium exposure group, and a high exposure group, following the model of Iyengar and Kinder's (1987) experiments.

Research Questions and Hypotheses

While the use of both Facebook and Twitter may result in agenda-setting effects, this study will focus on the effects of Facebook due to its high levels of penetration among Egyptian youth, with over 6.65 million members (Mubarak 2011). The agenda-setting influence of this social media website may be a product of the site's technological aspects that aid in sharing information previously found in traditional news sources or other online formats. The levels of exposure to news sources on Facebook may affect user agendas. This leads to the first research question of this study:

RQ1: Does information on a Facebook profile concerning a particular issue increase the salience of the issue to the user?

The independent variable in this research question of "information on a Facebook profile" is here operationally defined as media posted on a profile or sent via message through the social media website Facebook. The dependent variable of "the salience

of the issue to the user" is defined as the responses to three questions on a questionnaire measuring issue salience. These three questions use the same wording as those of Iyengar and Shanto (1987) in their experimental study of television news. The possible impact of news media on Facebook users' issue salience suggests the first three research hypotheses:

RH1: Media on a Facebook profile about a particular issue influences the user's perceived salience of that issue.

RH2: Facebook users who are exposed to a single issue will experience a greater shift in issue salience than those who are exposed to multiple issues.

RH3: Facebook users who are exposed to a particular issue will rank that issue as more important than users who are not exposed to the issue.

As mentioned in the literature review, young people are increasingly more technologically literate than older generations. Differences in Internet knowledge and use may exist even between freshmen and seniors in college. Additionally, differences in Internet socialization and information-seeking among men and women have been reported by many researchers, including Sokol & Sisler (2010) and Smith (2011). This suggests the following research question:

RQ2: Do demographic factors influence the issue salience of Facebook users?

As differences in age (here defined as school year in college) and gender may affect the agenda-setting process, the following hypotheses are posited:

RH4: Freshmen in college will have a greater degree of issue salience than students in higher classes after exposure to media concerning a particular issue on Facebook.

RH5: Gender influences issue salience among Facebook users.

RH6: Religious affiliation influences issue salience among Facebook users.

The independent variable in RH4 is age as determined by class year in college while the dependent variable will be the level of issue salience determined by the measures mentioned in RQ1. In RH5, the independent variable is gender and the dependent variable will also be this shift in issue salience. For RH6, the independent variable will be religious affiliation and the dependent variable will be the same as in RH4 and RH5. Through a better understanding of the influence of demographic factors on issue salience, this study hopes to identify confounding variables that may affect the agenda-setting influence of Facebook. Smith (2011) found differences due to gender and age in online searches about health information, indicating that demographic differences in Internet use may also impact agenda-setting online.

Pilot Survey

A pilot non-random survey was distributed two weeks before the study to determine what kinds of issues were on the agendas of young Egyptian Facebook users. This survey was distributed via Facebook and had 48 respondents. Participants were asked to list the six most important problems facing Egypt today. The responses for this question were tabulated for frequency and coded by issue. With a relatively low amount of responses, the issue of ignorance/illiteracy in Egypt was chosen as the issue to manipulate in the agenda-setting experiment. The issue was mentioned 11 times by respondents in the survey while issues like religious conflict and corruption received counts of 35 and 28 mentions, respectively. The issue of ignorance/illiteracy was chosen because respondents were aware of the issue, yet did not consider the issue as important as other issues, allowing room for manipulation of the issue's salience.

Stimulus Materials

The media content for this study was selected by an Internet search for videos, articles, and images with the query of "Illiteracy in Egypt" on the Google and Youtube websites. The results of these searches were assessed on the basis of timeliness and relevance to the elections in Egypt occurring at the time of the study. Each link's popularity was also taken into account; this popularity was determined by its ranking order on the search results of Google and Youtube. Both the articles and the blogs contained images and were relatively short, while the videos did not exceed five minutes each. Thus, the length of each item was also taken into account to be comparable to the natural length of media posted on Facebook walls. The items used in the No Exposure and Medium Exposure groups were selected using the same criteria but with a general search term, "Egypt". Each of these items dealt with news topics in Egypt compiled from pilot survey responses collected prior to the study. These four videos, three articles, and three blogs or non-news websites were then used for the No Exposure group. One video, two articles, and two blogs/ non-news websites from this group was added to the Medium Exposure group, which shared five media items with the High Exposure group.

The three groups were divided according to how much each group received exposure to the treatment issue of illiteracy/ignorance in Egypt. The No Exposure group received a mixture of media (four videos, three articles, and three blogs or non-news websites) of news or entertainment information. The Medium Exposure group received five items related to the issue of illiteracy/ignorance in Egypt and five items identical to the No Exposure group unrelated to the issue. The High Exposure group

received ten items all concerning the issue of illiteracy/ignorance in Egypt. However, each group received the same breakdown of media: four videos, three articles, and three blogs or non-news websites.

Procedure

During the course of the experiment, a different media item was posted on the Facebook walls of each participant in the treatment groups at specific times. The study lasted from Wednesday the 14th of December 2011 to Sunday the 18th of December. On Wednesday the participants took the pretest at the end of their class then added the researcher on Facebook. The students were told to open each link and write a one sentence summary of the content to test information retention. The material was posted once on Wednesday night then three times a day until Saturday night. From Thursday to Saturday, two posts administered to the participants would be public on their Facebook "walls" or profiles, and one post would be sent via message. This was done to prevent the buildup of stories on participants' profiles as this would detract from the naturalness of the experiment. On Sunday the students filled out the posttest in class.

Measures and Statistical Techniques

In order to test the agenda-setting hypotheses, participants' beliefs about problems facing Egypt were measured both before and after the experiment. These beliefs are operationally defined as the responses of participants to certain items on questionnaires distributed during the experiment. Both questionnaires (of the pretest

and posttest) asked participants to judge the importance of seven national problems, indicate the level of concern that electoral candidates should have about each issue, and choose the daily frequency with which they talked about each issue. The issues used in these measures were compiled from the responses to the pilot survey conducted prior to the experiment. The wording of two of the questions (judging importance and frequency of daily conversation) comes directly from Iyengar and Shanto's (1987) television news experiments. The third question combines two other questions (about personal concern and government action) from Iyengar and Shanto (1987) to measure the participants' judgment of how much candidates in the election should care about the issue. The exact wording of the three items may be found in Appendix A. Each item was analyzed separately as well as averaged with the others to form a composite index of issue importance from zero to one hundred. A score of zero on this index indicates that a participant thought the issue not important at all, candidates in the election should not concern themselves with the issue, and the issue never comes up as a topic of conversation. A score of one hundred means that the participant thought the issue was extremely important, considered that candidates should be very concerned with the issue, and talked about the issue constantly. However, most participants ranked the issues between these two extremes. Additionally, the second questionnaire included a ranking measure to test the agenda-setting role of Facebook relative to the control group. Participants were asked to rank seven issues facing Egypt in importance to observe the general importance of the issue after the study.

The responses of participants were codified and analyzed using the IBM SPSS statistical analysis tool. One tailed dependent t-tests were done within each experimental group to determine any statistically significant differences resulting

from the treatment (testing RH1, RH2, and RH3). One-way analyses of variance (ANOVA) were also performed to determine significant differences between the groups. Additionally, Chi-Square tests of association were calculated to determine the relationship between the results and gender, age, and religious affiliation (testing RH4, RH5, and RH6).

CHAPTER FIVE - Results

A variety of statistical tests were performed on the data collected from the pretest and posttest in order to test the hypotheses of the study. For several of these tests, the scores from the surveys were first transformed into a hundred point index comprised of the responses to each item on the questionnaire. The score obtained by each participant (a composite of responses from the three target questions) was transformed from a 14 point scale into a hundred point index. The response to each item was quantified into a score from 1 to 5 (or 1 to 4 in the case of Question 4) and was then multiplied by 7.1429 to create this index rating. This transformed rating was used to provide a more accurate representation of the data in several statistical tests.

Research Question 1: Agenda Setting Effects

The first research question posed by this study (RQ1) asked whether information on a Facebook profile concerning a particular issue increased the salience of the issue to the user. This study posited that media on a Facebook profile about a particular issue would influence the user's perceived salience of that issue (RH1). In order to test this hypothesis, paired sample t-tests were performed on the responses for each group on individual measures (questions) as well as on the overall index score composed of the sum of the three measures. One-way ANOVA tests were conducted on the posttest scores of each treatment group to identify any significant differences in the means of each group after the various levels of treatment.

Question 1/2

The first measure (Question 1 on the pretest, Question 2 on the posttest) asked respondents to rate several issues according to importance with a five point rating scale. The response options available were "extremely important", "very important", "important", "not so important", and "not important at all" (the full survey can be seen in Appendix A). The issue of illiteracy/ignorance scored relatively highly in the pretest among all four groups, and the mean increased slightly in the High Exposure, Medium Exposure, and No Exposure groups after the treatment. In the No-Facebook Control group, the mean decreased during the time of the study. Figure 1 (Tables 1 – 4) shows the difference in means for the four treatment groups in Question 1/2:

Table 1

High Exposure Frequencies Question 1/2

		PreIndex	PostIndex
N	Valid	19	19
	Missing	3	3
Mean		32. 330632	32.7066
Std. Deviation		6.4628	5.4893

Table 2

Medium Exposure Frequencies Question 1/2

		PreIndex	PostIndex
N	Valid	17	17
	Missing	3	3
Mean		34.033353	34.873647
Std. Deviation		4.0163	2.3722

Table 3

No Exposure Frequencies Question 1/2

		PreIndex	PostIndex
N	Valid	18	18
	Missing	3	3
Mean		26.587056	27.380667
Std. Deviation		4.1033	2.7388

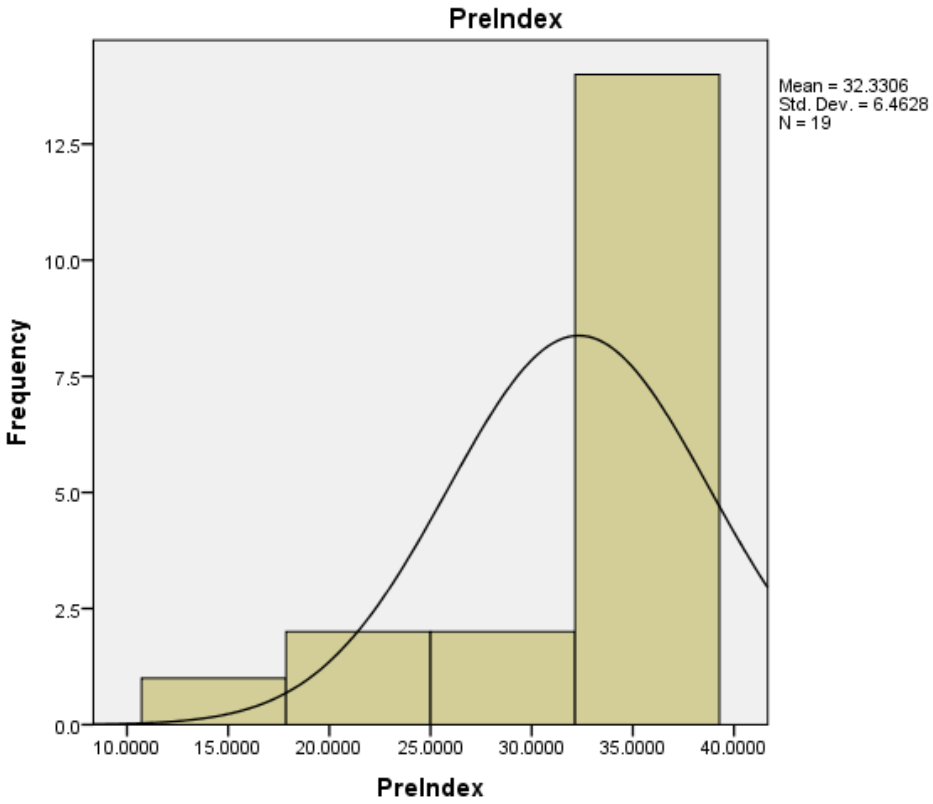
Table 4

No- Facebook Control Frequencies Question 1/2

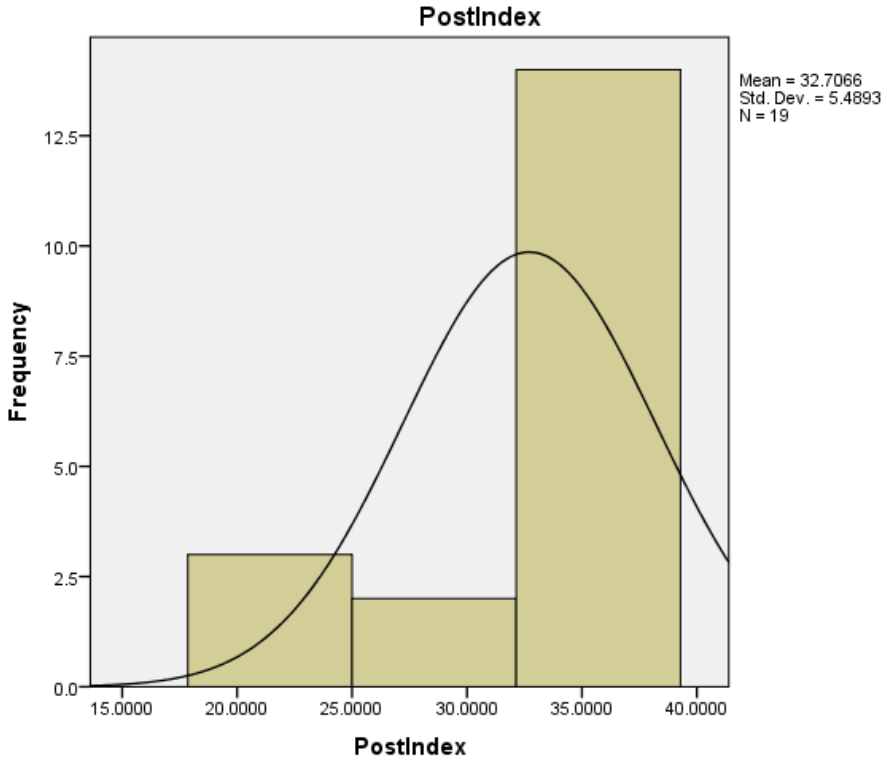
		PreIndex	PostIndex
N	Valid	17	17
	Missing	3	3
Mean		31.512353	29.831824
Std. Deviation		5.0876192	6.3057311

Figure 1: Frequencies of Responses From Question 1/2

The amount of mean change was highest in the Medium Exposure group (M = 0.8403) while the High Exposure (M = 0.3759) and No Exposure (M = 0.7936) groups also experienced a small positive increase. The No-Facebook Control group mean decreased over the same period (M = - 1.6805). Additionally, the standard deviations of the High Exposure (from 6.4628 to 5.4893), Medium Exposure (from 4.0163 to 2.3722), and No Exposure (from 4.1033 to 2.7388) decreased over the course of the study while the standard deviation of the No-Facebook Control group increased (from 5.0876 to 6.3057). These results seem to indicate that participants who were exposed to treatment were more likely to change their issue importance than those that were not. Figures 2 through 5 show a graphical representation of the participants' responses before and after the study:

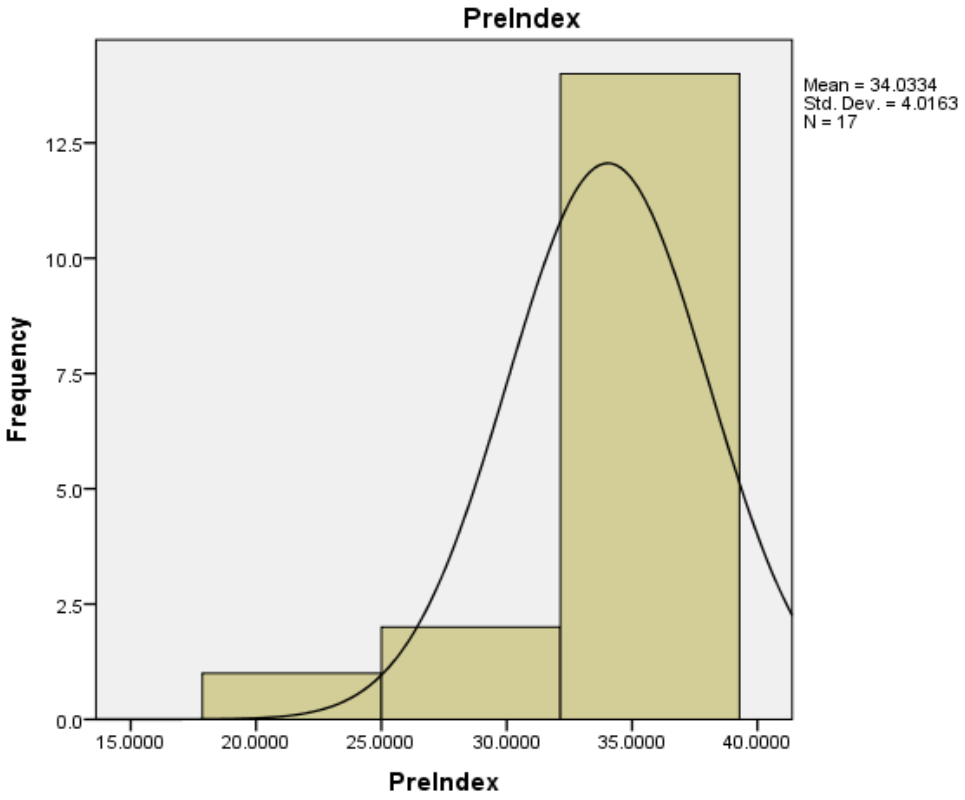


High Exposure Question 1 Pretest Results

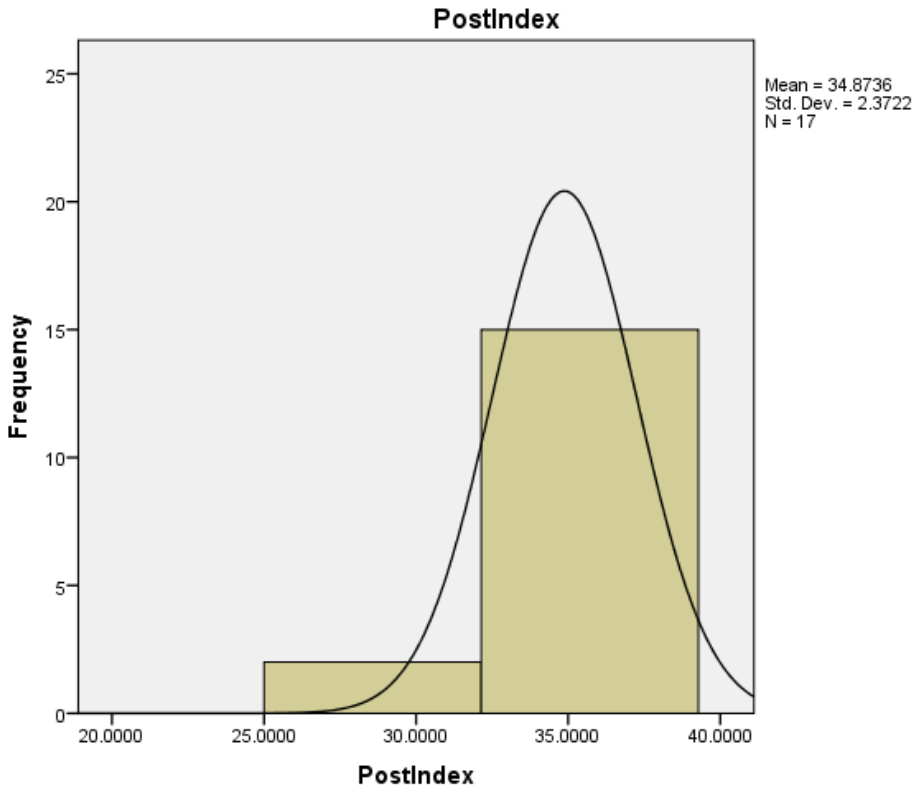


High Exposure Question 2 Posttest Results

Figure 2: High Exposure Group Results From Question 1/2

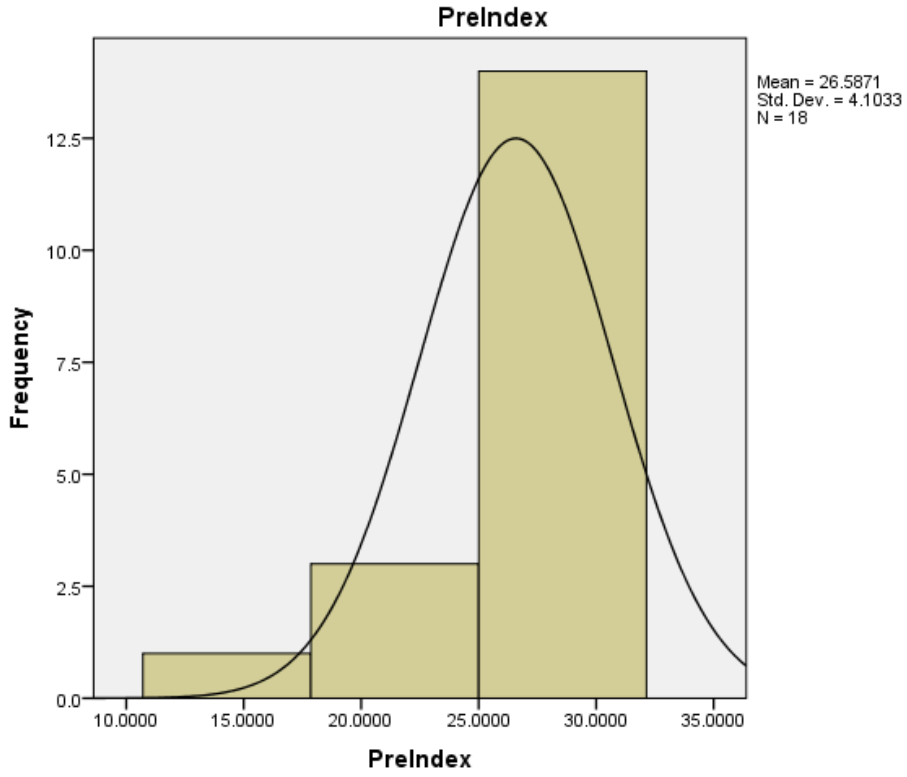


Medium Exposure Question 1 Pretest Results

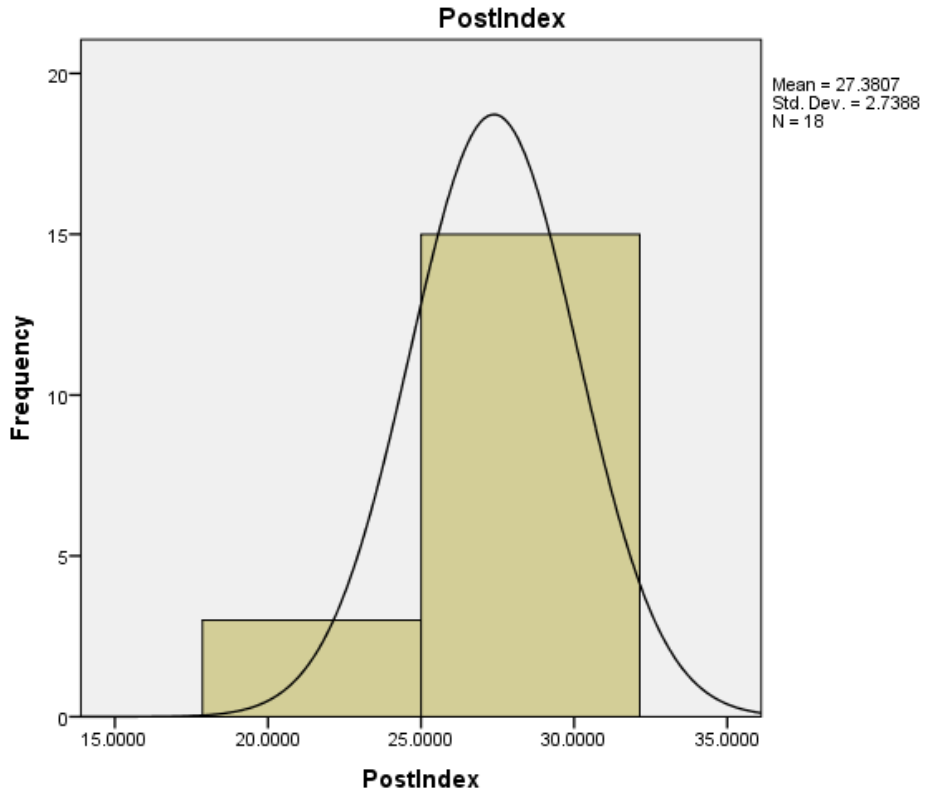


Medium Exposure Question 2 Posttest Results

Figure 3: Medium Exposure Group Results From Question 1/2

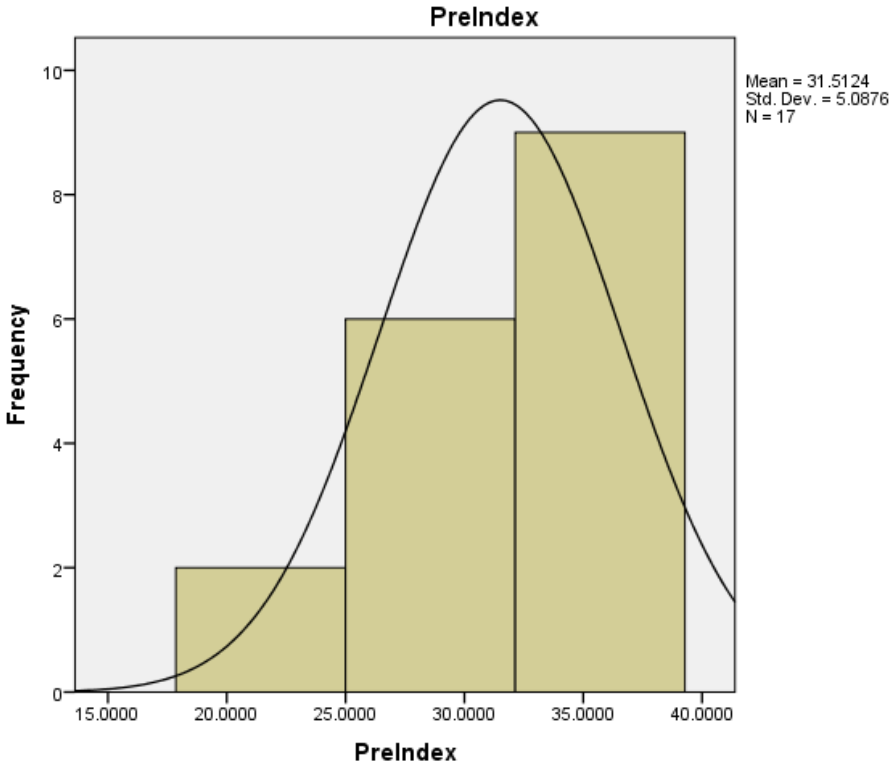


No Exposure Question 1 Pretest Results

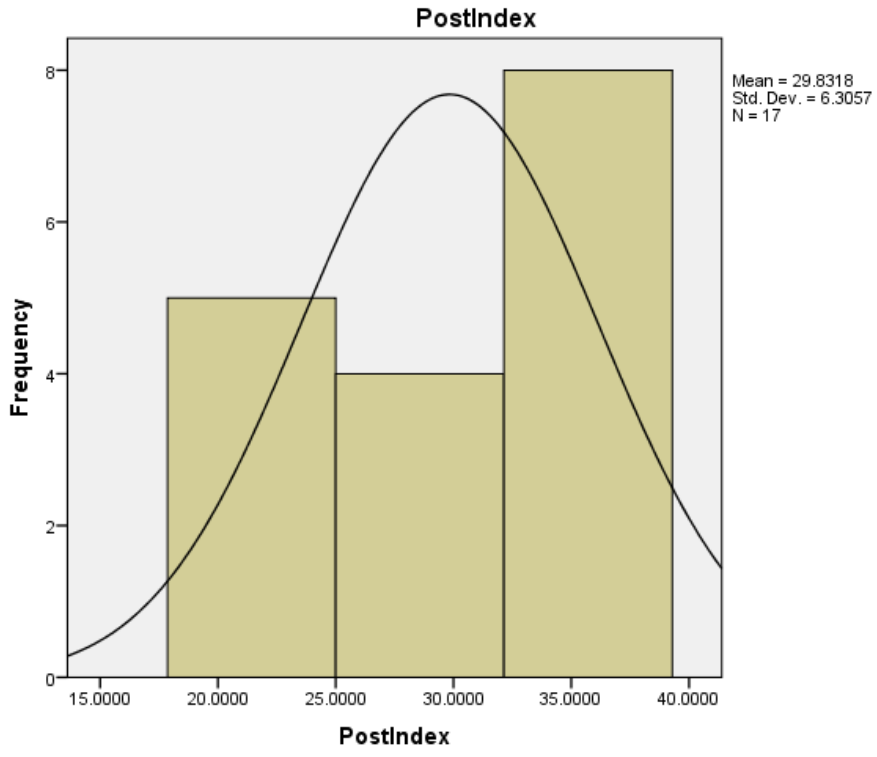


No Exposure Question 2 Posttest Results

Figure 4: No Exposure Group Results From Question 1/2



No-Facebook Control Question 1 Pretest Results



No-Facebook Control Question 2 Posttest Results

Figure 5: No-Facebook Control Group Results From Question 1/2

These results seem to suggest that participants changed their issue importance as a result of the treatment. However, to determine whether these observations were statistically supported, paired-sample t-tests were conducted for each group, and the results are shown in Figure 6 (Tables 5 - 8). Each group was evaluated at the $p < 0.05$ level. For the High Exposure group, there were no significant differences between the pretest and posttest with a $t(18)$ value of - 0.325 and a p-value < 0.749. The Medium Exposure group had the lowest p-value of the treatment groups but also had no significant differences with a $t(16)$ value of -1.0 where $p < 0.332$. The No Exposure group had a $t(17)$ value of - 0.697 and a p-value < 0.495. The No-Facebook Control group had the smallest p-value of the groups with a $t(16)$ value of 1.461 and a $p < 0.164$. While not significantly different, these results indicate that the Medium Exposure group had a more significant difference than the High and No Exposure groups. Overall, this data does not support RH1, as the mean scores of each group were not significantly different after the treatment. Furthermore this data appears to contradict RH2, as the Medium Exposure group appeared to experience a greater shift in issue salience than the High Exposure group even though the participants were exposed to more issues.

Table 5

High Exposure Question 1/2 Paired-Sample T-Test

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	-.3759	5.0358	1.1553	-2.8031	2.0512	-.325	18	.749

Table 6

Medium Exposure Question 1/2 Paired-Sample T-Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	-.8403	3.4648	.8403	-2.6217	.9411	-1.000	16	.332

Table 7

No Exposure Question 1/2 Paired-Sample T-Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	-.7936	4.8310	1.1387	-3.1960	1.6088	-.697	17	.495

Table 8

No-Facebook Control Question 1/2 Paired-Sample T-Test

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	1.6805	4.7442	1.1506	-.7587	4.1197	1.461	16	.164

Figure 6: Paired-Sample T-Tests for Question 1/2 By Group

As all four groups rated the issue of ignorance/illiteracy relatively highly in the first measure, a one-way ANOVA test was performed to see if there were any significant differences between the group means after the treatment had been performed. Table 9 shows the results of this test:

Table 9

One-way ANOVA Test of Question 2 Posttest Means Between Groups

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	227.385	3	75.795	3.029	.035
Within Groups	1676.749	67	25.026		
Total	1904.134	70			

Table 9

- At a significance level of $p < 0.05$ the p-value of this analysis was 0.035, indicating a significant difference between the means of the four groups. A post-hoc Tukey test was performed to identify which groups exhibited this significant difference, shown in Table 10.

Table 10

Post-hoc Tukey Test of One-way ANOVA test of Question 2

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High Exposure	Medium Exposure	-2.1670681	1.6701159	.568	-6.567323	2.233187
	No Exposure	-.6265322	1.6454491	.981	-4.961798	3.708733
	NF Control	2.8747554	1.6701159	.321	-1.525500	7.275011
Medium Exposure	High Exposure	2.1670681	1.6701159	.568	-2.233187	6.567323
	No Exposure	1.5405359	1.6918815	.799	-2.917065	5.998137
	NF Control	5.0418235*	1.7158810	.023	.520991	9.562656
No Exposure	High Exposure	.6265322	1.6454491	.981	-3.708733	4.961798
	Medium Exposure	-1.5405359	1.6918815	.799	-5.998137	2.917065
	NF Control	3.5012876	1.6918815	.174	-.956313	7.958889
NF Control	High Exposure	-2.8747554	1.6701159	.321	-7.275011	1.525500
	Medium Exposure	-5.0418235*	1.7158810	.023	-9.562656	-.520991
	No Exposure	-3.5012876	1.6918815	.174	-7.958889	.956313

*. The mean difference is significant at the 0.05 level.

Table 10

As shown above, the mean of the posttest of the Medium Exposure group was significantly different than that of the No-Facebook Control group at a p-level of

0.023. While both the Medium Exposure group and the No-Facebook Control group had similarly high means in the pretest (M = 34.0334 and M = 31.5124 respectively) the posttest means had a much greater disparity (M = 34.8736 and M = 29.8318). This significant difference supports RH1 and RH2 as participants in the Medium Exposure Group were exposed to media about the issue of ignorance/illiteracy while those in the No-Facebook Control group received no treatment at all. However, there were no significant differences between the High and No Exposure groups, indicating that RH2 is not supported by the one-way ANOVA test as the High Exposure group should have had a significantly higher mean than the others.

Question 4

The second measure (Question 4) modified Iyengar and Shanto's (1987) question concerning "people in the government" to fit current events in Egypt by asking how much participants thought candidates in the parliamentary elections should worry about each issue. The possible responses were "a lot", "some", "a little", and "not at all". The average mean of each group declined while the standard deviation increased over the course of the study with the exception of the No Exposure group. The mean of the No Exposure group increased (from 25.4629 to 26.1486) while the standard deviation decreased (from 6.3515 to 6.0887). Figure 7 (Tables 11 - 14) shows a breakdown of this mean change by group:

Table 11

High Exposure Frequencies Question 4

		PreIndex	PostIndex
N	Valid	19	19
	Missing	3	3
Mean		26.691526	26.315579
Std. Deviation		3.2311403	4.1596095

Table 12

Medium Exposure Frequencies Question 4

		PreIndex	PostIndex
N	Valid	17	17
	Missing	3	3
Mean		27.310647	26.890471
Std. Deviation		2.8064676	4.0161121

Table 13

No Exposure Frequencies Question 4

		PreIndex	PostIndex
N	Valid	20	20
	Missing	1	1
Mean		25.462870	26.148575
Std. Deviation		6.3514535	6.0887274

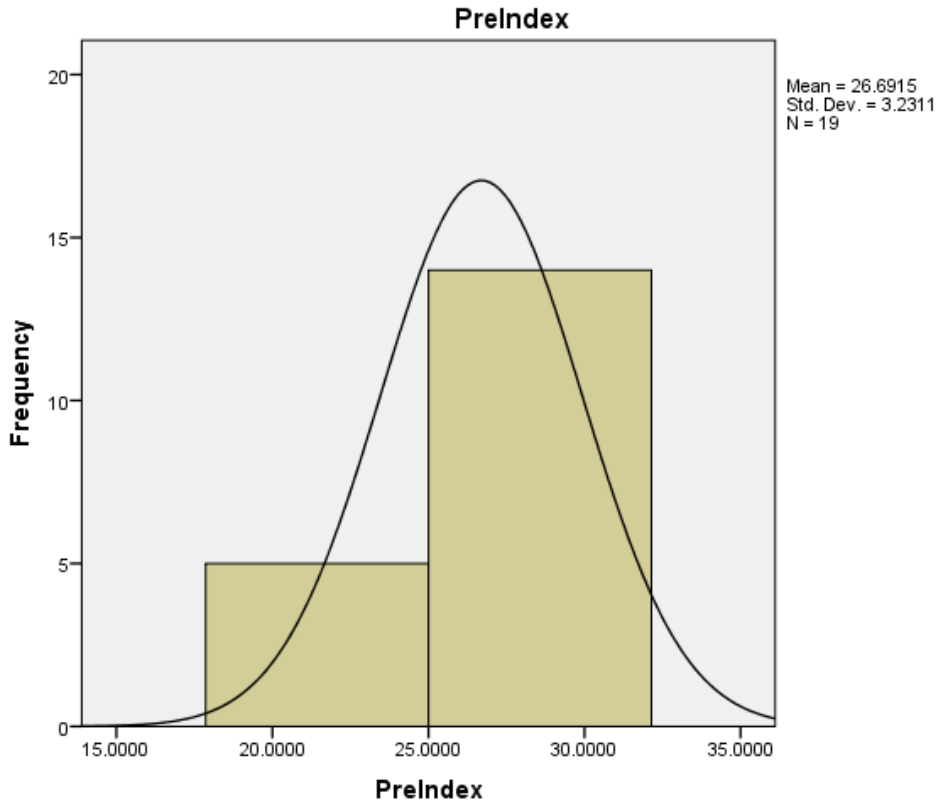
Table 14

No-Facebook Control Frequencies Question 4

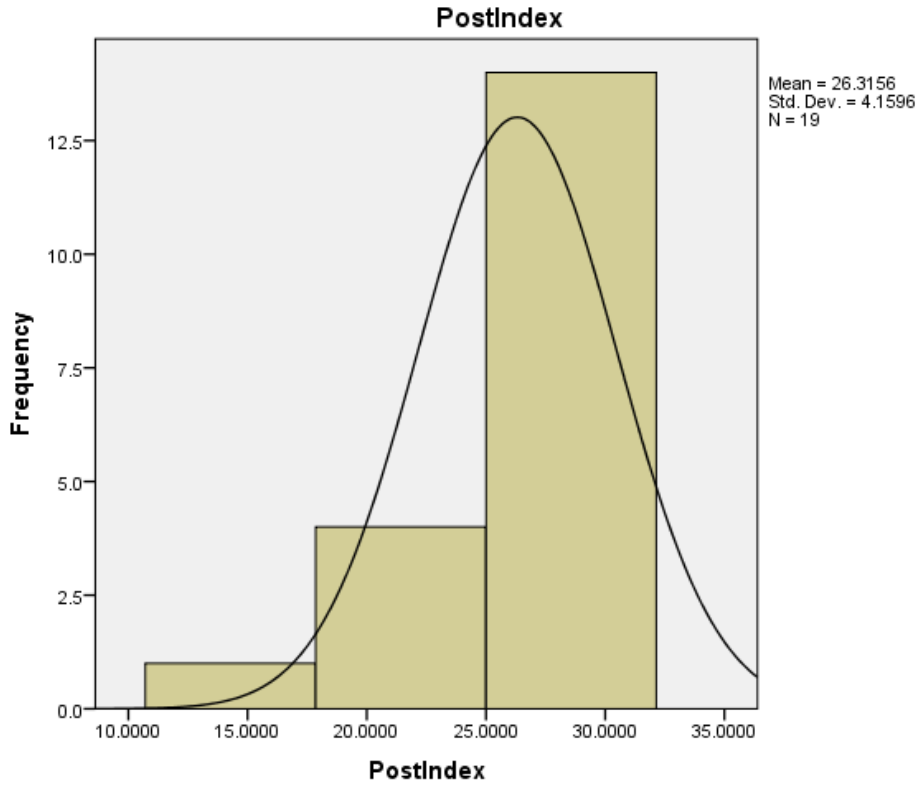
		PreIndex	PostIndex
N	Valid	17	17
	Missing	3	3
Mean		27.730765	27.310647
Std. Deviation		2.3718981	2.8064676

Figure 7: Frequencies of Responses From Question 4

As the mean of both the High Exposure and Medium Exposure groups declined after the treatment, the results from this question indicate that RH1 and RH2 are not supported. With the exception of the No Exposure group, the decrease in mean and increase in standard deviation shows that participants were not likely to change their issue importance. Figures 8 through 11 reveal the variation in the responses of participants following the treatment or lack thereof. These charts imply that several participants (except for those in the No Exposure group) thought that candidates in the election should worry less about the issue of ignorance/illiteracy even after the study was completed. This lower ranking resulted in the negative mean change for these groups, while the No Exposure group had a small positive change in the mean score after the treatment.

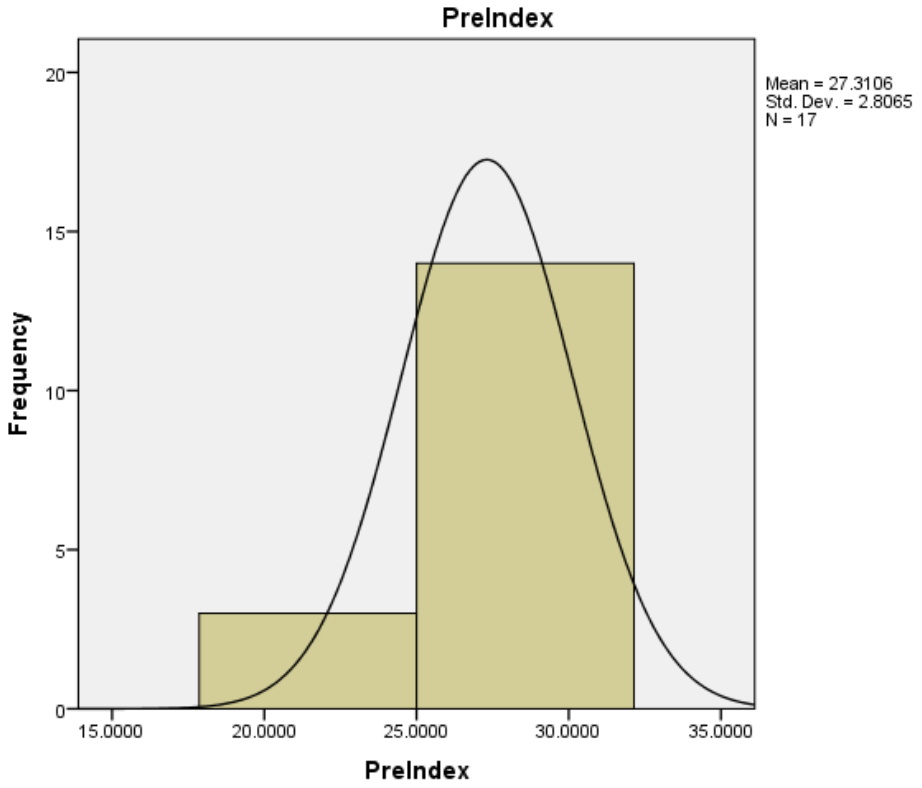


High Exposure Question 4 Pretest Responses

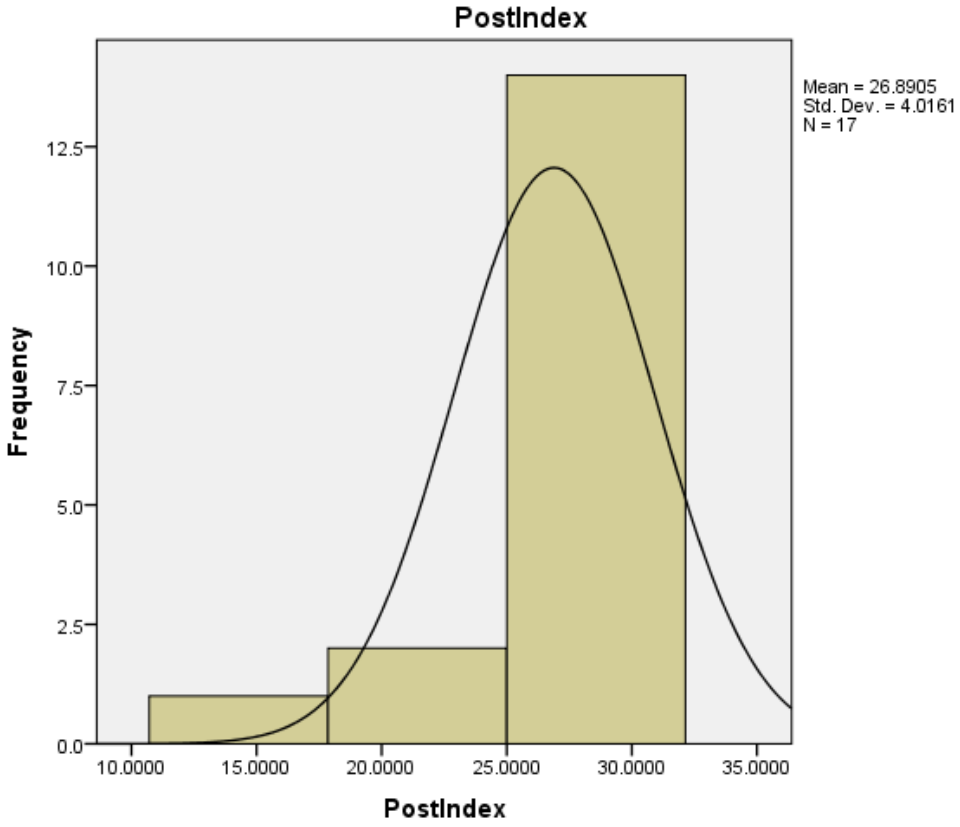


High Exposure Question 4 Posttest Responses

Figure 8: High Exposure Group Results From Question 4

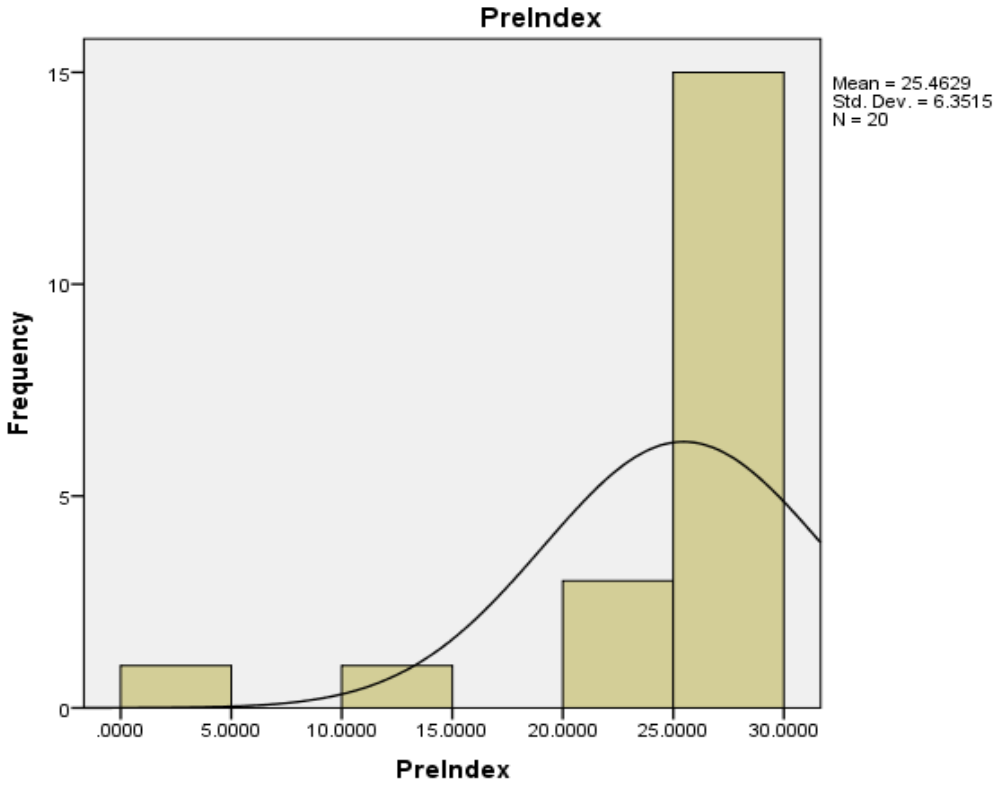


Medium Exposure Question 4 Pretest Responses

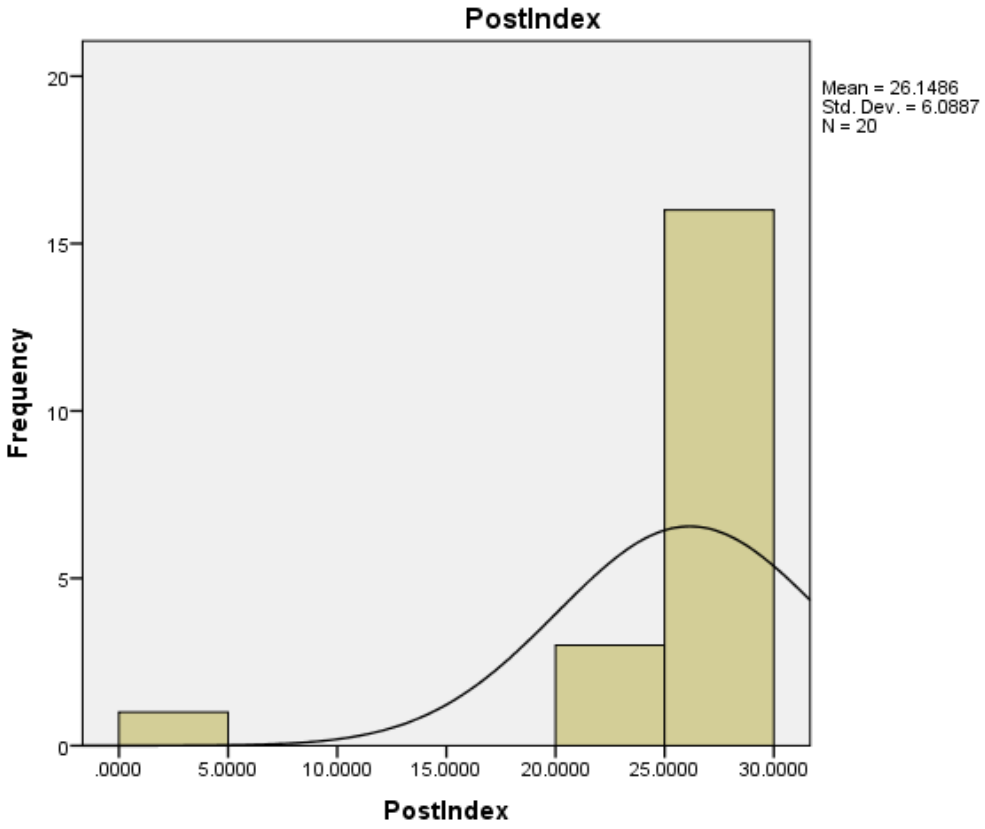


Medium Exposure Question 4 Posttest Responses

Figure 9: Medium Exposure Group Results From Question 4

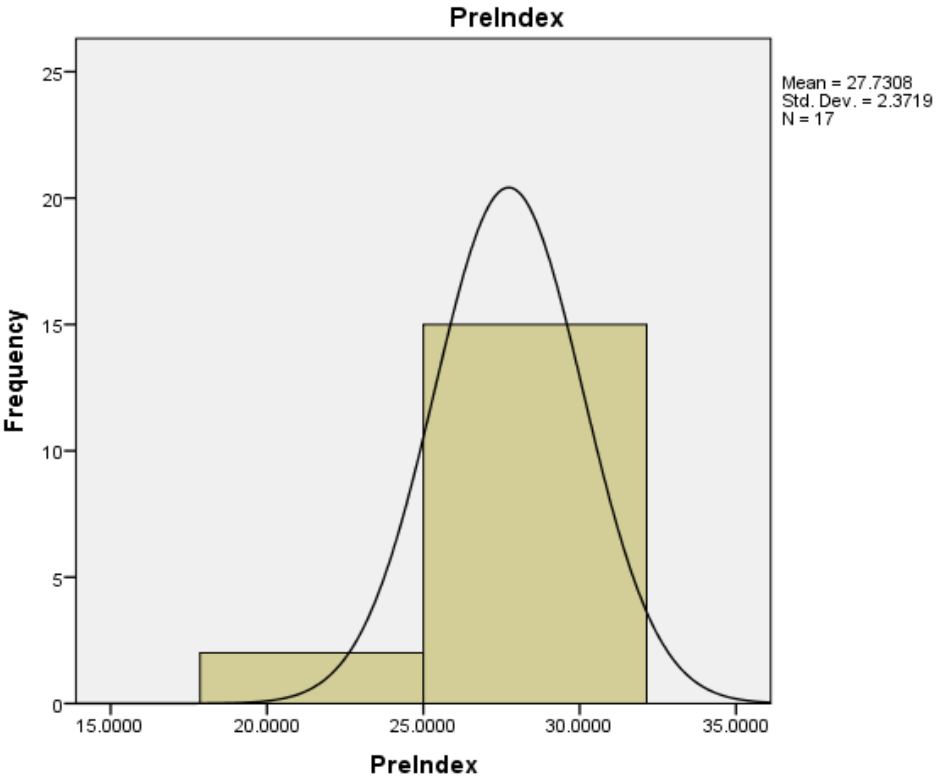


No Exposure Question 4 Pretest Responses

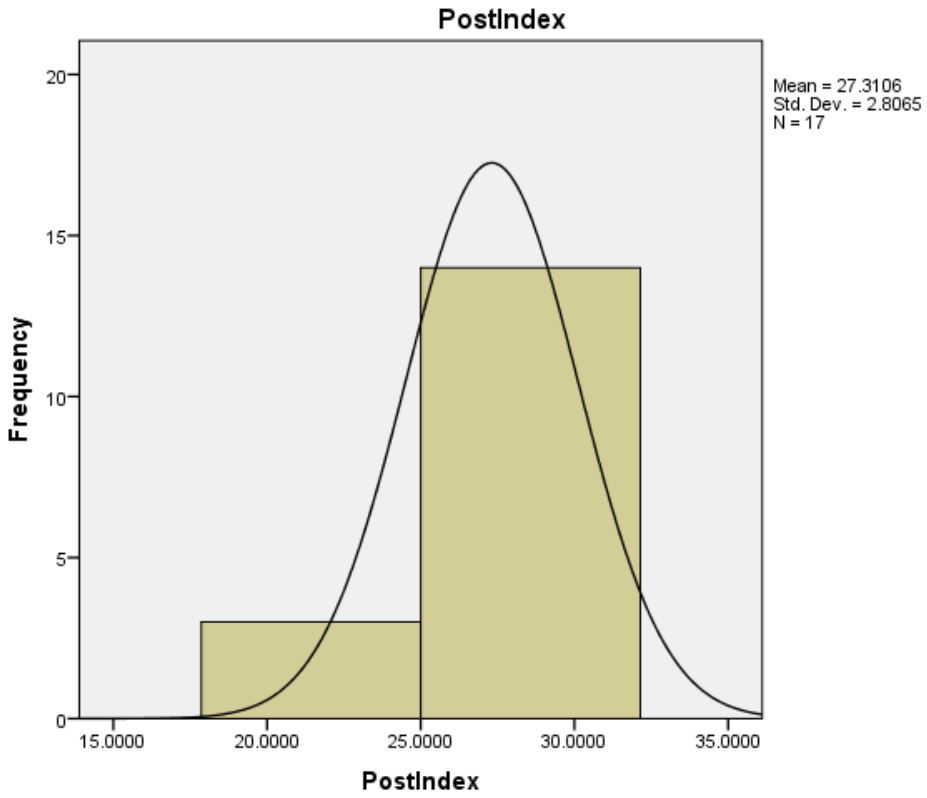


No Exposure Question 4 Posttest Responses

Figure 10: No Exposure Group Results From Question 4



No-Facebook Control Question 4 Pretest Responses



No-Facebook Control Question 4 Posttest Responses

Figure 11: No-Facebook Control Group Results From Question 4

While the negative mean change of three of these groups does not support the research hypotheses, a paired-sample t-test was conducted on each group to see if this change was statistically significant at the $p < 0.05$ level. None of the groups showed a statistically significant decrease (or increase in the case of the No Exposure group). The High Exposure and Medium Exposure groups yielded similar t-scores and levels of significance ($t(18)$ with a p-value of 0.716 and $t(16)$ with a p-value of 0.718 respectively). This high p-value suggests that the decrease in means was most likely not a result of the treatment; however, this decrease does not validate RH1 or RH2. The No Exposure group, with a $t(19)$ value of - 0.667 and a p-value of 0.513, also did not support these hypotheses. The No-Facebook Control group had a $t(16)$ value of 0.566 and a p-value of 0.579 similar to those of the No Exposure Group. While both the No Exposure and No-Facebook Control groups have similar t-test results, both groups demonstrated no statistically significant changes in this question during the study. Figure 12 (Tables 15 - 18) shows the results from each group's paired-sample t-test:

Table 15

High Exposure Question 4 Paired-Sample T-Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	.3759	4.4372	1.0180	-1.7627	2.5146	.369	18	.716

Table 16

Medium Exposure Question 4 Paired-Sample T-Test

		Paired Differences					t	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	.4202	4.7043	1.1410	-1.9985	2.8389	.368	16	.718

Table 17

No Exposure Question 4 Paired-Sample T-Test

		Paired Differences					T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex - PostIndex	-.6857	4.5951	1.0275	-2.8363	1.4649	-.667	19	.513

Table 18

No-Facebook Control Question 4 Paired-Sample T-Test

		Paired Differences					T	Df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex - PostIndex	.4201	3.0621	.7427	-1.1543	1.9945	.566	16	.579

Figure 12: Paired-Sample T-Tests for Question 4 By Group

Although the paired-sample t-tests revealed no statistically significant differences within individual groups, a one-way ANOVA test was performed to determine whether any significant differences existed in the posttest means between the groups. Table 19 shows the results of this test.

Table 19

One-way ANOVA Test of Question 4 Posttest Means Between Groups

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	13.248	3	4.416	.359	.782
Within Groups	823.049	67	12.284		
Total	836.297	70			

Table 19

The high significance value (p = 0.782) between the groups indicates that the means of each posttest group are not significantly different from each other. In other words, the treatment or lack of treatment produced no significant effects on this question. A post-hoc Tukey test was performed to determine the exact significance levels between the groups in order to expose any further relationships between the group means. Each group was found to have a high significance value with the others, with the lowest value (p = 0.792) occurring between the High Exposure and Medium Exposure groups. However, the overall results demonstrate that the means of each group were not significantly different and thus do not support RH1 or RH 2. The results of this test are shown in Table 20.

Table 20

Post-hoc Tukey Test of One-way ANOVA test of Question 4

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High Exposure	Medium Exposure	-.5748916	1.1701069	.961	-3.657773	2.507990
	No Exposure	-1.0650877	1.1528249	.792	-4.102436	1.972261
	NF Control	-.9950681	1.1701069	.830	-4.077949	2.087813
Medium Exposure	High Exposure	.5748916	1.1701069	.961	-2.507990	3.657773
	No Exposure	-.4901961	1.1853562	.976	-3.613255	2.632862
	NF Control	-.4201765	1.2021706	.985	-3.587536	2.747183
No Exposure	High Exposure	1.0650877	1.1528249	.792	-1.972261	4.102436
	Medium Exposure	.4901961	1.1853562	.976	-2.632862	3.613255
	NF Control	.0700196	1.1853562	1.000	-3.053039	3.193078
NF Control	High Exposure	.9950681	1.1701069	.830	-2.087813	4.077949
	Medium Exposure	.4201765	1.2021706	.985	-2.747183	3.587536
	No Exposure	-.0700196	1.1853562	1.000	-3.193078	3.053039

Table 20

Question 6/5

The third measure (Question 6 on the pretest and Question 5 on the posttest) was copied directly from Iyengar and Shanto (1987) and asked participants how often they talked with others about issues. The possible responses were "almost every day", "frequently", "sometimes", "rarely", and "not at all". Unlike the other groups, the High Exposure group saw a decrease in the mean from 26.3156 to 25.5638 and a decrease in standard deviation. The other groups all had a positive change in the mean and an increase in standard deviation. The results seem to partially support RH1 in that participants in the Medium and No Exposure groups changed their issue importance; however, as this change was less than that of the High Exposure group, RH2 is not supported. Figure 13 (Tables 21 - 24) displays these changes in the group means.

Table 21

High Exposure Frequencies Question 6/5

		PreIndex	PostIndex
N	Valid	19	19
	Missing	3	3
Mean		26.315632	25.563789
Std. Deviation		7.9153468	6.8657084

Table 22

Medium Exposure Frequencies Question 6/5

		PreIndex	PostIndex
N	Valid	17	17
	Missing	3	3
Mean		29.831706	32.352765
Std. Deviation		5.1969927	5.7127283

Table 23

No Exposure Frequencies Question 6/5

		PreIndex	PostIndex
N	Valid	17	17
	Missing	5	5
Mean		28.991412	30.672176
Std. Deviation		6.4236659	6.5679681

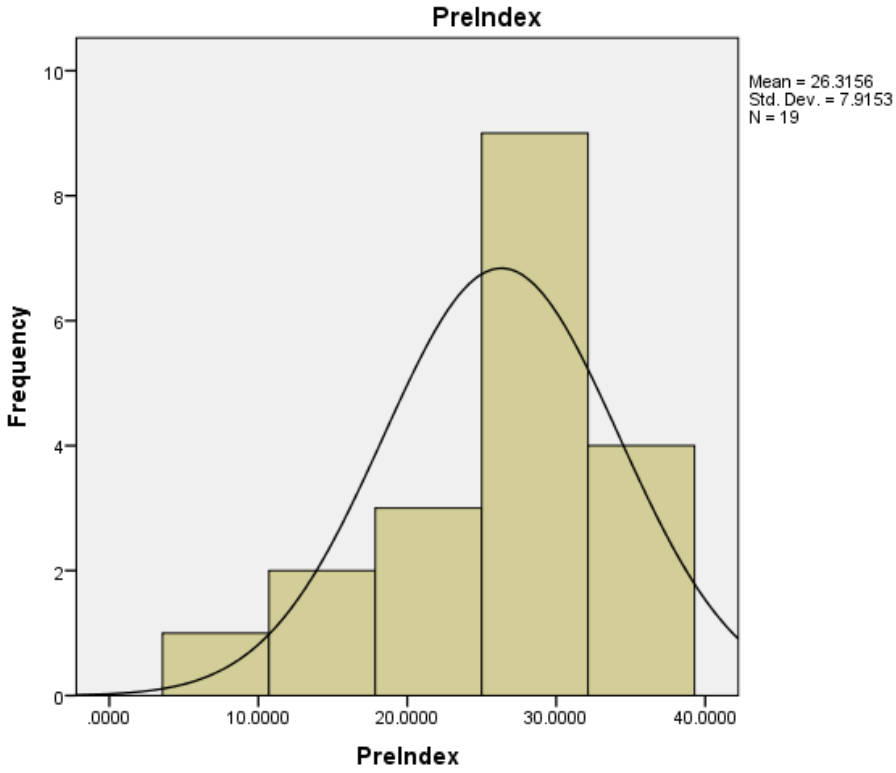
Table 24

No-Facebook Control Frequencies Question 6/5

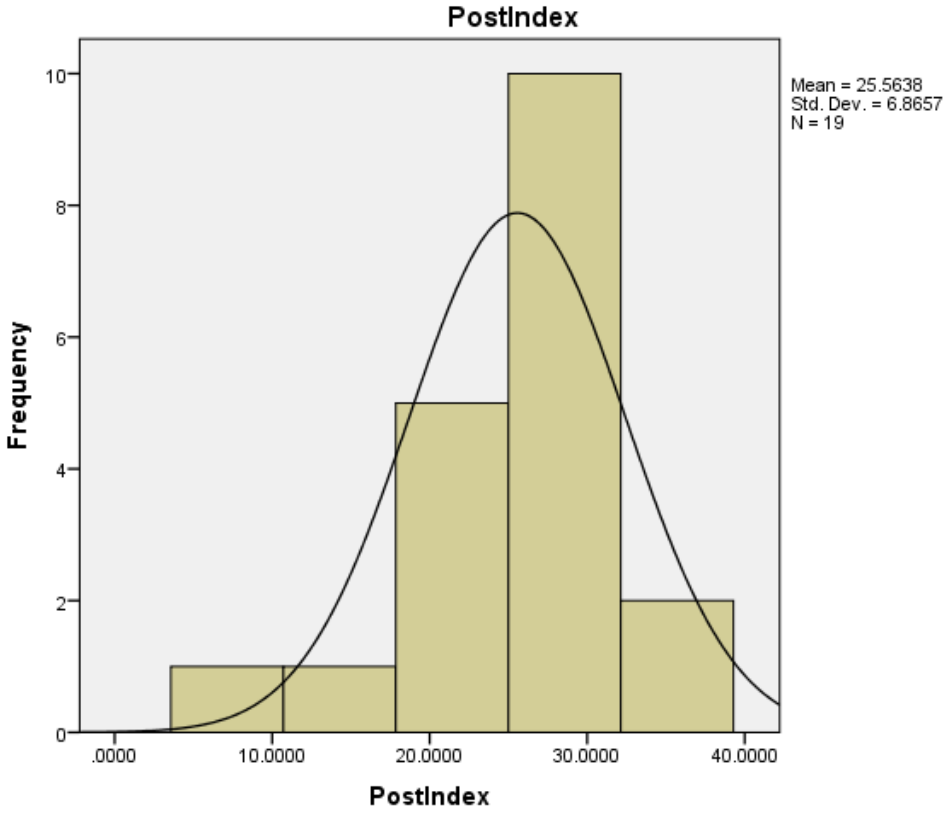
		PreIndex	PostIndex
N	Valid	17	17
	Missing	3	3
Mean		25.630235	28.571353
Std. Deviation		5.6797096	7.1425625

Figure 13: Frequencies of Responses From Question 6/5

As the importance of the issue seemed to rise naturally in the No-Facebook Control group, both RH1 and RH2 are not supported. However, the Medium Exposure group (mean change $M = 2.5211$) increased more than that of the No Exposure group ($M = 1.6808$), partially supporting RH2 as the increase in media corresponds with the increase in mean. Figures 14 through 17 show a graphical representation of these mean changes. The most striking change is found in that of the Medium Exposure groups, when the responses change from a normal distribution to a strongly skewed pattern in the direction of talking more frequently about the issue. Also, the High Exposure group did not experience as much of a negative change as the other groups reflected positive changes and decreased in standard deviation, indicating a consolidation of opinion.

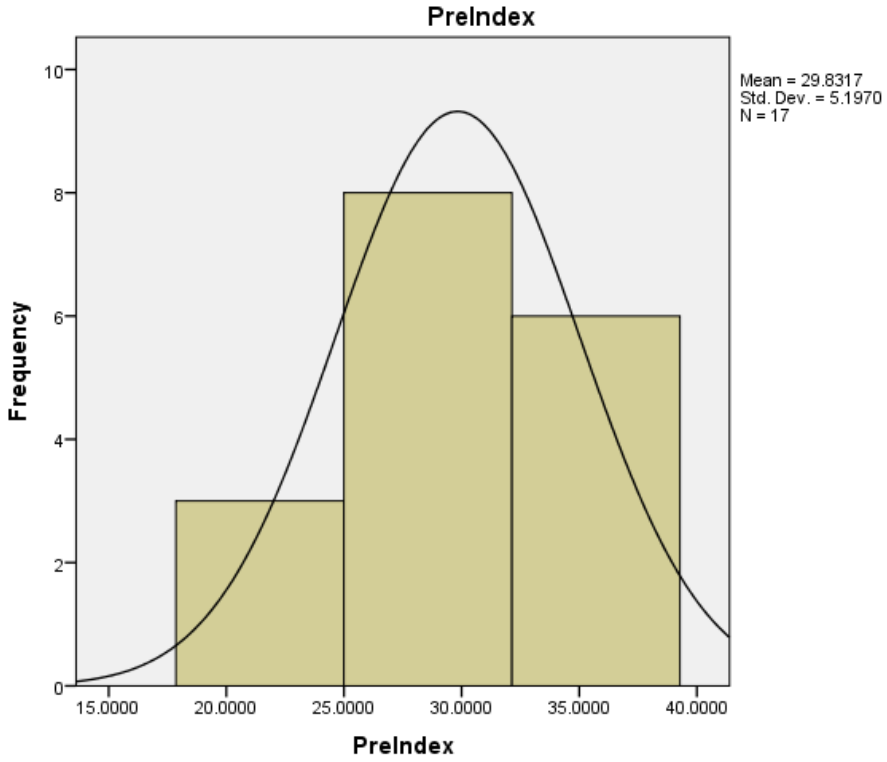


High Exposure Question 6 Pretest Responses

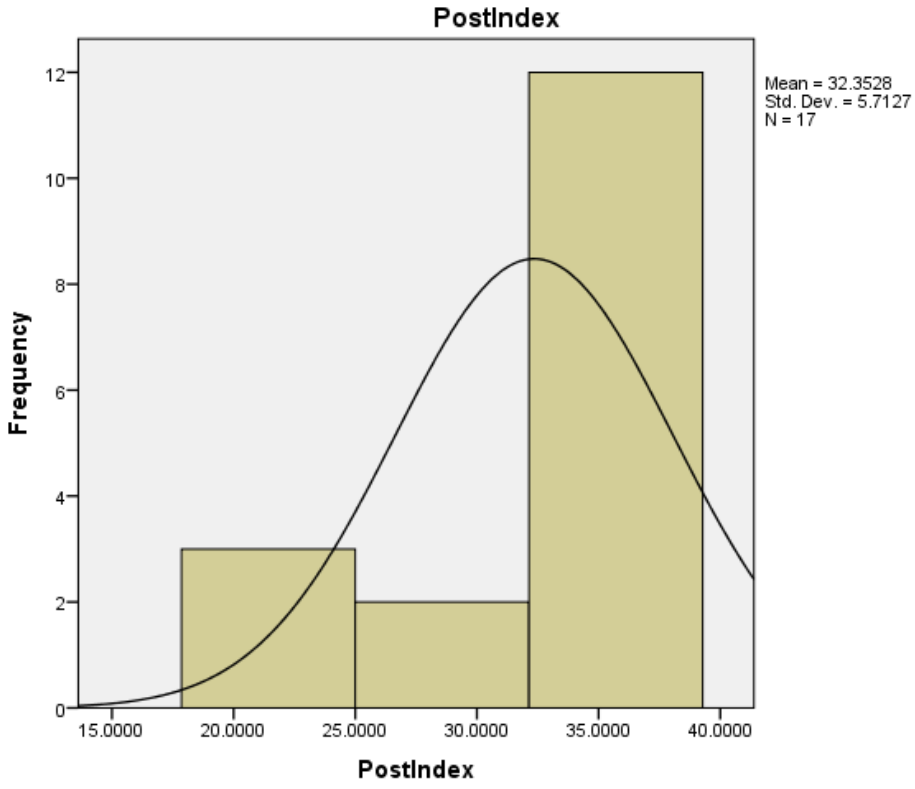


High Exposure Question 5 Posttest Responses

Figure 14: High Exposure Group Results From Question 6/5

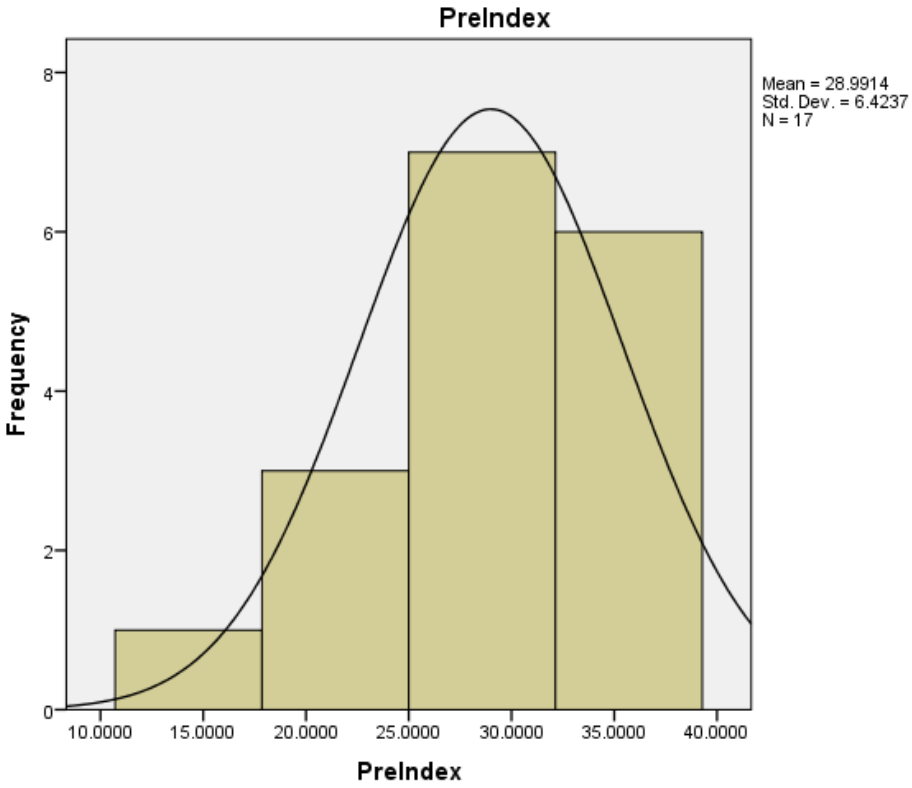


Medium Exposure Question 6 Pretest Responses

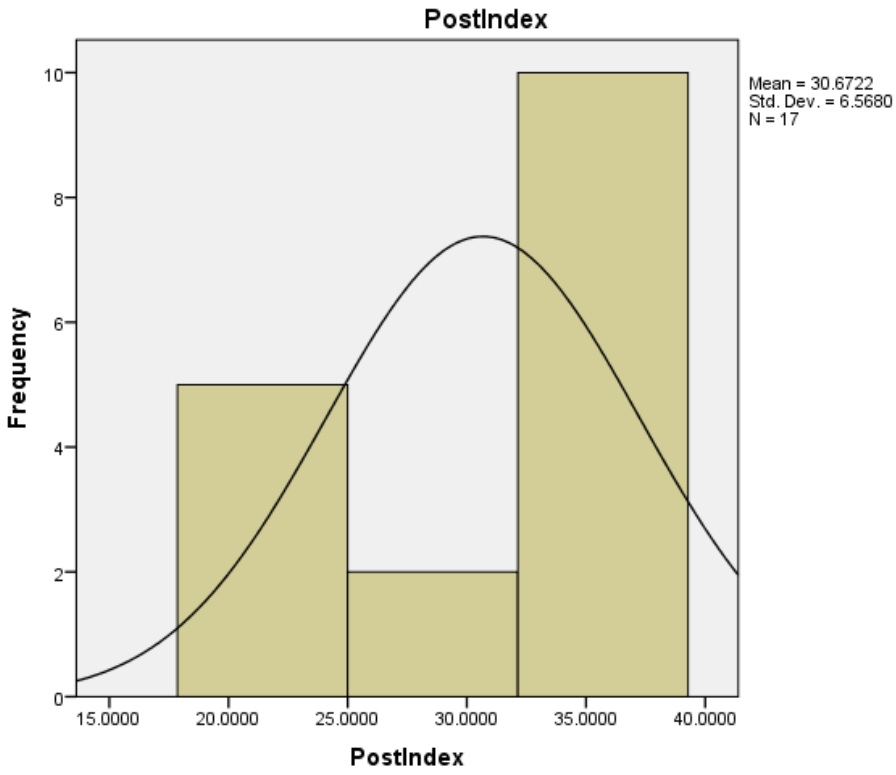


Medium Exposure Question 5 Posttest Responses

Figure 15: Medium Exposure Group Results From Question 6/5

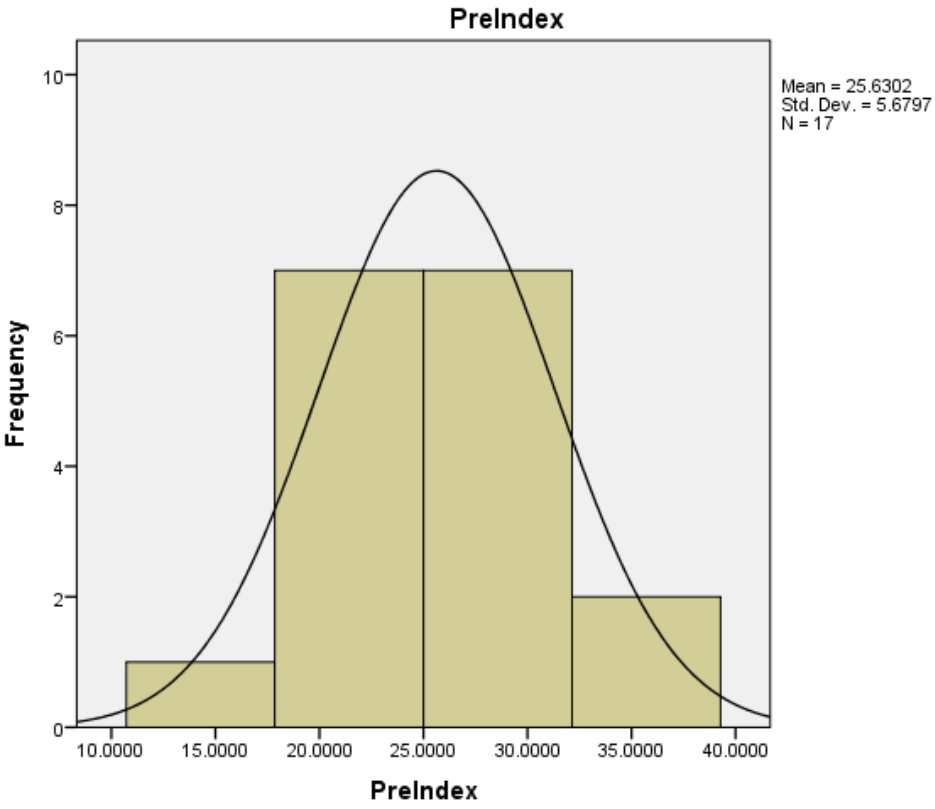


No Exposure Question 6 Pretest Responses

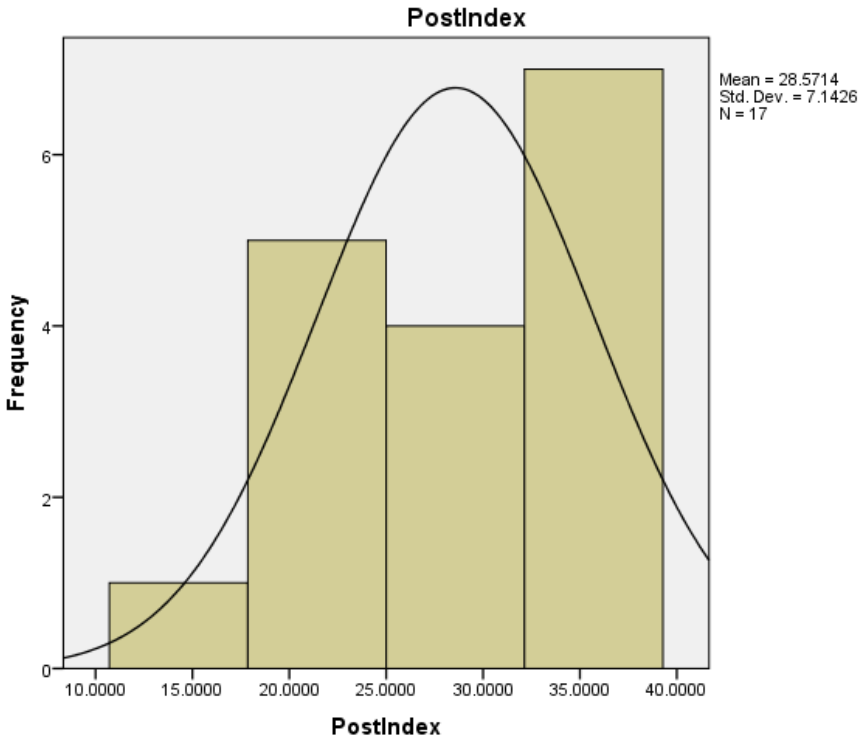


No Exposure Question 5 Pretest Responses

Figure 16: No Exposure Group Results From Question 6/5



No-Facebook Control Question 6 Pretest Responses



No-Facebook Control Question 5 Posttest Responses

Figure 17: No-Facebook Control Group Results From Question 6/5

As three of the groups showed a positive change in mean, paired-sample t-tests were performed on the data to determine if any of these changes were statistically significant. These tests asked whether participants talked more about the issue of ignorance/illiteracy as a result of chance or the experimental treatment. Several participants in the No Exposure group did not complete this question, resulting in lower degrees of freedom for this test. While no group had a significance level less than 0.05, the Medium Exposure group (with a $t(16)$ value of - 1.852 and p-value of 0.083) had almost significantly different means. However, both the No Exposure group (with a $t(16)$ value of - 1.167 and a $p < 0.260$) and the No-Facebook Control group (with a $t(16)$ value of - 1.692 and $p < 0.110$) also had strong differences between means. Thus, RH2 is partially supported by the Medium Exposure group as the group exhibits the greatest change after treatment. However, as both non-treatment groups also displayed high degrees of difference, RH1 is not supported. The High Exposure group had the highest significance level of all groups, with a $t(18)$ value of 0.622 and a p-value < 0.542. As this level is higher than the other groups, RH2 is not supported, as the decrease in mean indicates that after exposure to the highest levels of media about the issue, participants did not increase talking about that issue. Figure 18 (Tables 25 - 28) displays the paired-sample t-tests for Question 6/5.

Table 25

High Exposure Question 6/5 Paired-sample T-test

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	.7518	5.2674	1.2084	-1.7870	3.2906	.622	18	.542

Table 26

Medium Exposure Question 6/5 Paired-sample T-test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	-2.5211	5.6133	1.3614	-5.4072	.3650	-1.852	16	.083

Table 27

No Exposure Question 6/5 Paired-sample T-test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	-2.9411	7.1686	1.7386	-6.6269	.7446	-1.692	16	.110

Table 28

No-Facebook Control Question 6/5 Paired-sample T-test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex - PostIndex	-1.6808	5.9382	1.4402	-4.7339	1.3724	-1.167	16	.260

Figure 18: Paired-Sample T-Tests for Question 6/5 By Group

As several of the groups had changes in means with high levels of significance, a one-way ANOVA test was performed on the posttest data to reveal whether any group had a mean significantly different than another. The results of this test would better show

whether the High Exposure group differed significantly than the groups receiving no treatment. The results from this test are shown in Table 29.

Table 29

One-way ANOVA Test of Question 5 Posttest Means Between Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	463.741	3	154.580	3.546	.019
Within Groups	2877.118	66	43.593		
Total	3340.859	69			

Table 29

The results of this test ($p = 0.019$) show that there is a significant difference between the posttest means of the groups at the level of $p < 0.05$. In other words, this test reveals that the means of some of the groups are significantly different than others, possibly validating RH2. A post-hoc Tukey test was then performed on the data in order to clarify which groups were significantly different. Table 30 shows the results of this test. The posttest mean of the High Exposure group was significantly different ($p = 0.016$) than that of the Medium Exposure group. The mean of the High Exposure group also had a relatively low significance level ($p = 0.104$) with that of the No Exposure Group. These results support RH2 in that the experimental treatment caused a greater amount of significant difference between the groups that received treatment than those without treatment. However, as the only significant difference lies between the Medium Exposure group that had the highest overall mean and the High Exposure group which decreased, RH1 is not fully supported.

Table 30

Post-hoc Tukey Test of One-way ANOVA test of Question 5

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High Exposure	Medium Exposure	-6.7889752*	2.2042297	.016	-12.598695	-.979256
	No Exposure	-5.1083870	2.2042297	.104	-10.918107	.701333
	NF Control	-3.0075635	2.2042297	.526	-8.817283	2.802156
Medium Exposure	High Exposure	6.7889752*	2.2042297	.016	.979256	12.598695
	No Exposure	1.6805882	2.2646307	.880	-4.288331	7.649508
	NF Control	3.7814118	2.2646307	.348	-2.187508	9.750331
No Exposure	High Exposure	5.1083870	2.2042297	.104	-.701333	10.918107
	Medium Exposure	-1.6805882	2.2646307	.880	-7.649508	4.288331
	NF Control	2.1008235	2.2646307	.790	-3.868096	8.069743
NF Control	High Exposure	3.0075635	2.2042297	.526	-2.802156	8.817283
	Medium Exposure	-3.7814118	2.2646307	.348	-9.750331	2.187508
	No Exposure	-2.1008235	2.2646307	.790	-8.069743	3.868096

*. The mean difference is significant at the 0.05 level.

Table 30

Index Scores

The three measures examined above were cumulated into an index score out of one hundred for each participant. These scores provide an overall measure of the agenda-setting effects for each group. The mean of each group was relatively high perhaps due to the election cycle taking place during the course of the study. The High Exposure group index mean decreased after the treatment with a change of M = - 0.7518. The other three groups had a positive mean change with the Medium Exposure group having the greatest shift (from 91.1764 to 94.1176). The standard deviation of the High Exposure group also decreased while the standard deviations of the other groups increased slightly, with the No-Facebook Control group displaying the greatest change (from 9.4092 to 12.6268). Figure 19 (Tables 31 - 34) summarizes the frequencies for each group.

Table 31

High Exposure Index Frequencies

		PreIndex	PostIndex
N	Valid	19	19
	Missing	3	3
Mean		85.338263	84.586474
Std. Deviation		12.9260088	11.4835634

Table 32

Medium Exposure Index Frequencies

		PreIndex	PostIndex
N	Valid	17	17
	Missing	3	3
Mean		91.176353	94.117647
Std. Deviation		9.2889987	9.8570827

Table 33

No Exposure Index Frequencies

		PreIndex	PostIndex
N	Valid	17	17
	Missing	5	5
Mean		87.394824	90.336059
Std. Deviation		10.5732826	10.9907930

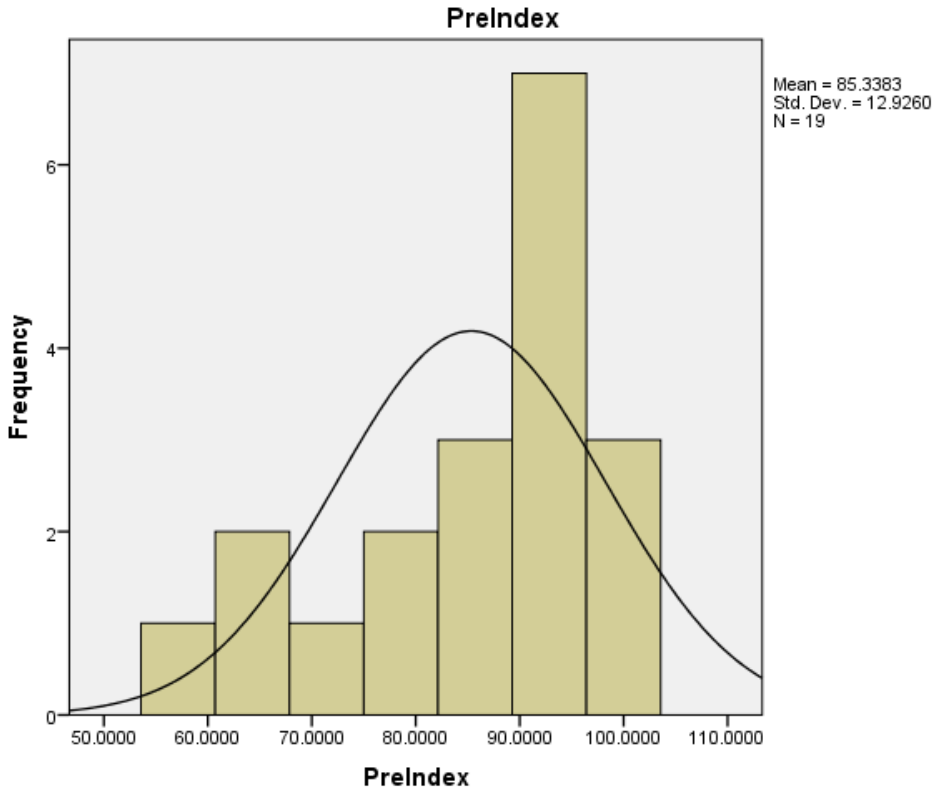
Table 34

No-Facebook Control Index Frequencies

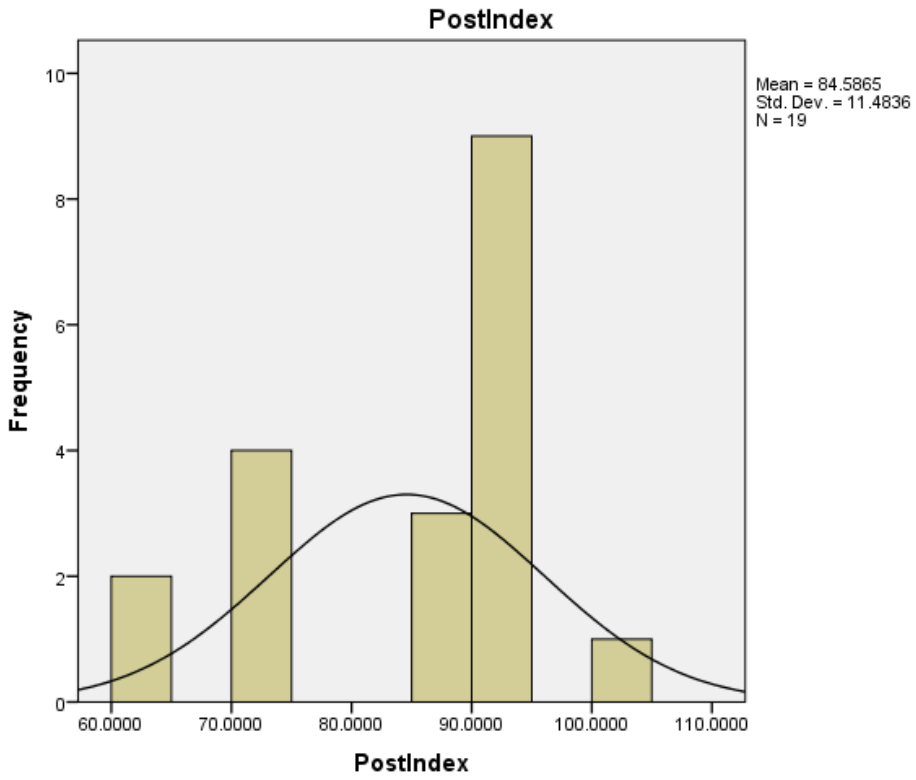
		PreIndex	PostIndex
N	Valid	17	17
	Missing	3	3
Mean		84.873824	85.714294
Std. Deviation		9.4092462	12.6267704

Figure 19: Group Index Frequencies

RH2 is partially supported by this data in that the mean change of each group increases (No-Facebook Control M = 0.8405, No Exposure M = 2.9412) with the level of treatment up to the Medium Exposure group (M =2.9413). However, as the mean change of the Medium Exposure and No Exposure groups is nearly identical despite differing in treatment, this hypothesis cannot be fully supported. The changes in means do suggest that the treatment does appear to have had an effect on both the No Exposure and Medium Exposure groups. Figures 20 through 23 show the graphical representations of these changes.

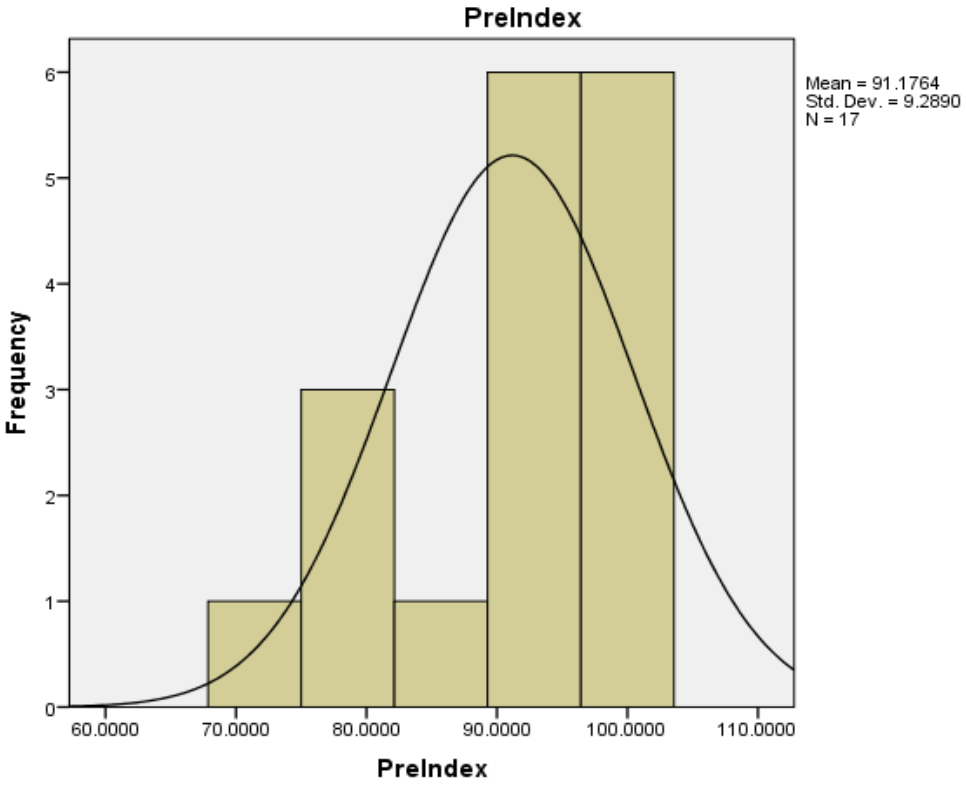


High Exposure Pretest Index Scores

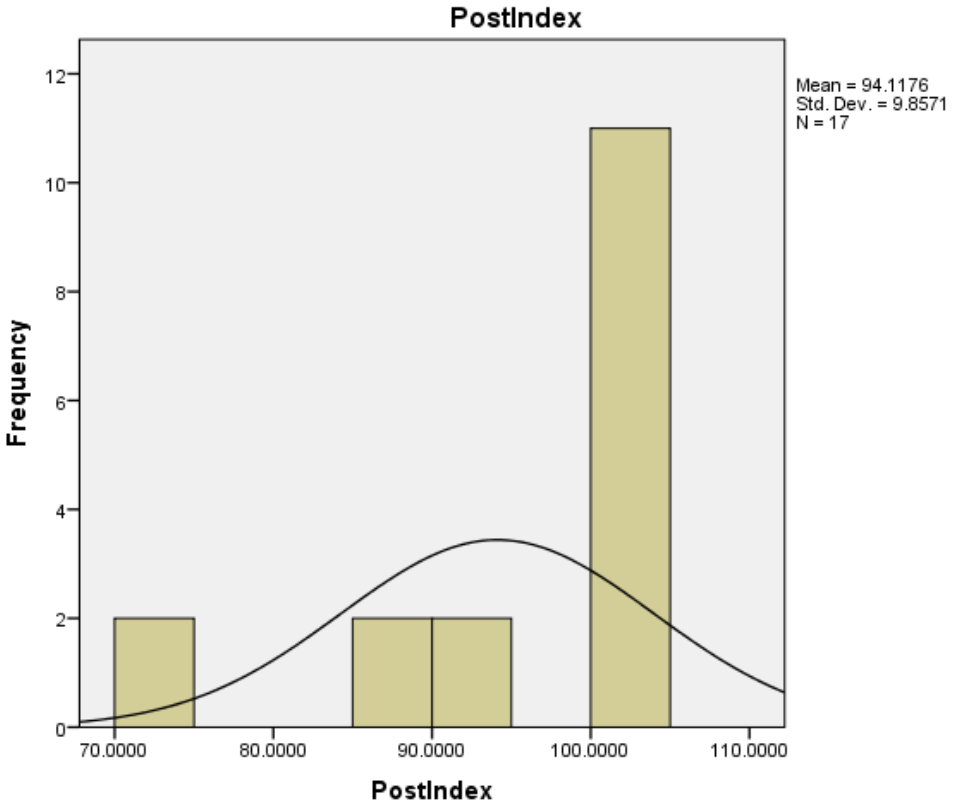


High Exposure Posttest Index Scores

Figure 20: High Exposure Group Index Scores

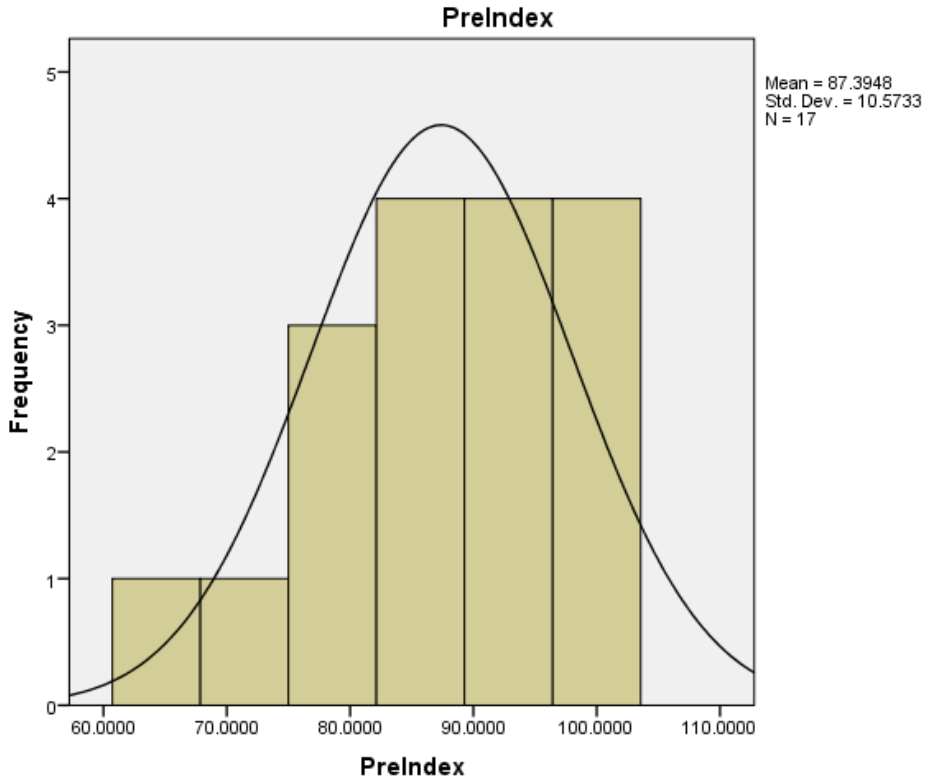


Medium Exposure Pretest Index Scores

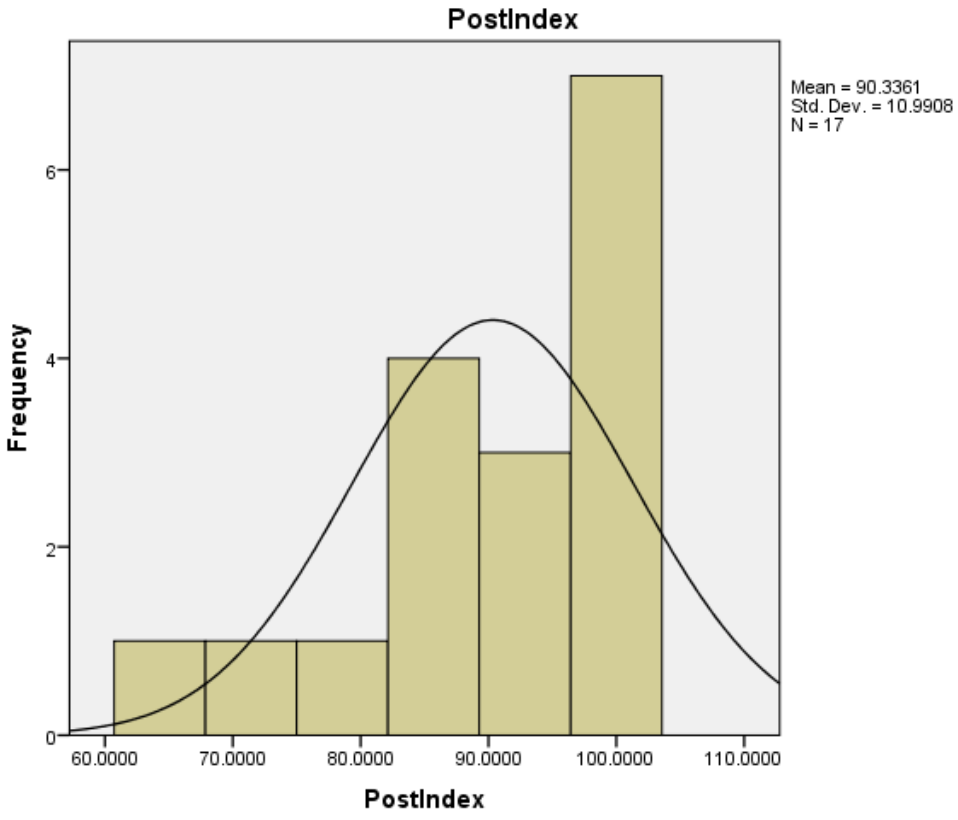


Medium Exposure Posttest Index Scores

Figure 21: Medium Exposure Group Index Scores

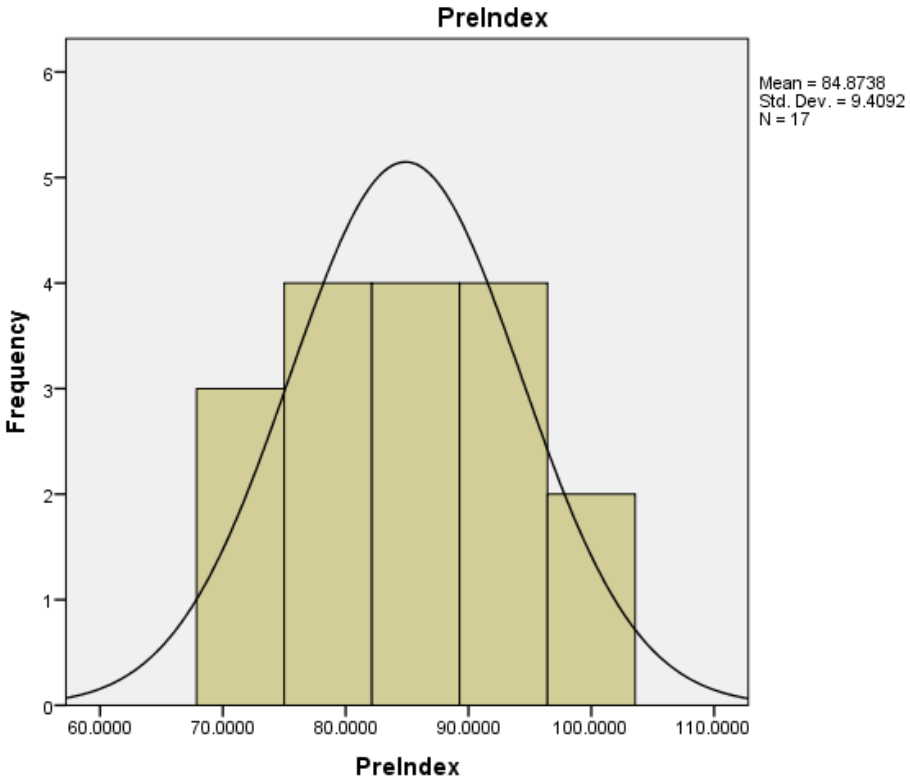


No Exposure Pretest Index Scores

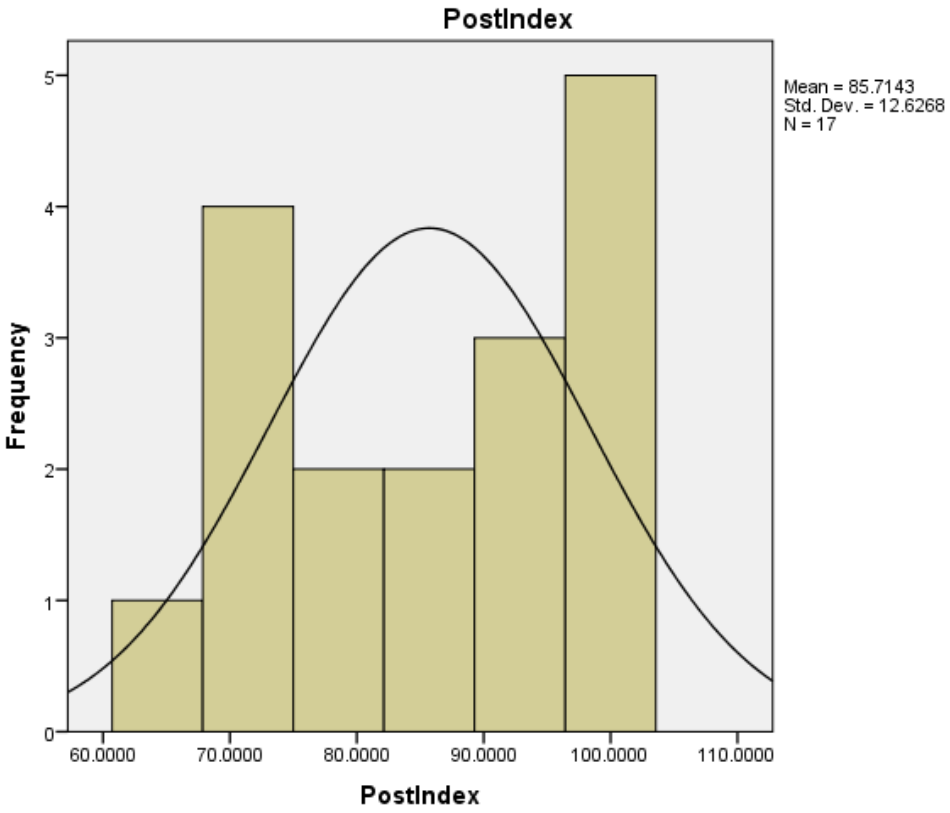


No Exposure Posttest Index Scores

Figure 22: No Exposure Group Index Scores



No-Facebook Control Pretest Index Scores



No-Facebook Control Posttest Index Scores

Figure 23: No-Facebook Control Group Index Scores

In order to determine if the mean changes in these groups were statistically significant, paired-sample t-tests were performed on the index of each group. At a significance level of $p < 0.05$ none of the groups were found to have statistically different changes in their index scores. This result does not support RH1 or RH2 in that the experimental treatment did not produce statistically significant changes in the participants' issue agendas. The results of the High Exposure group, with $t(18) = 0.567$ and a p-value < 0.0578, do not support RH1 or RH2 in that the mean change was negative and not significant, indicating that participants with a high level of treatment did not change their issue importance due to this treatment. The Medium Exposure and No Exposure groups had a nearly identical amount of mean change, resulting in $t(16) = -1.198$ and $p < 0.248$ for both groups. The No-Facebook Control group had the highest significance level of all the groups with $t(16) = -0.368$ and $p < 0.717$, showing that the change was not statistically significant. The results of the paired-sample t-tests do not support RH2 in that the group with the highest level of treatment (the High Exposure group) had a higher level of significance than that of groups with lower levels of treatment. Furthermore, as the No Exposure group had nearly the same difference of means as the Medium Exposure group and this difference was not statistically significant, RH1 is not supported. The results of these paired-sample t-tests are available in Figure 24 (Tables 35 - 38).

Table 35

High Exposure Index Paired-Sample T-test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	.7518	5.7807	1.3262	-2.0344	3.5380	.567	18	.578

Table 36

Medium Exposure Index Paired-Sample T-test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	-2.9413	10.1201	2.4545	-8.1446	2.2620	-1.198	16	.248

Table 37

No Exposure Index Paired-Sample T-test

		Paired Differences					T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	-2.9412	10.1199	2.4544	-8.1444	2.2619	-1.198	16	.248

Table 38

No-Facebook Control Index Paired-Sample T-test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PreIndex – PostIndex	-.8405	9.4092	2.2821	-5.6782	3.9973	-.368	16	.717

Figure 30: Paired-Sample T-Tests for Group Indexes

While none of the paired-sample t-tests revealed significant differences within groups as a result of the treatment, a one-way ANOVA test was performed on both the pretest and posttest index of each group to determine differences between the groups. One-way ANOVA tests were performed on both the pretest indexes and the posttest indexes in order to determine if the treatment affected the mean index scores of the

two treatment groups. The results of the pretest index one-way ANOVA are found in Table 39.

Table 39

One-way ANOVA Test of Index Pretest Means Between Groups

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	427.053	3	142.351	1.237	.303
Within Groups	7593.290	66	115.050		
Total	8020.343	69			

Table 39

The significance level between the pretest index scores of each group shows that p = 0.303 and that there are thus no significant differences between the groups. This result indicates that prior to receiving any treatment, the experimental groups had no significant differences in their importance of the issue of ignorance/illiteracy in Egypt. A post-hoc Tukey test was performed on the pretest index scores to further examine the differences between groups, with the results shown in Table 40. Most of the groups share a very high level of significance and thus have similar means in the pretest.

Table 40

Post-hoc Tukey Test of One-way ANOVA Test of Pretest Indexes

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High Exposure	Medium Exposure	-5.8380898	3.5809068	.369	-15.276337	3.600157
	No Exposure	-2.0565604	3.5809068	.939	-11.494808	7.381687
	NF Control	.4644396	3.5809068	.999	-8.973808	9.902687
Medium Exposure	High Exposure	5.8380898	3.5809068	.369	-3.600157	15.276337
	No Exposure	3.7815294	3.6790320	.734	-5.915348	13.478407
	NF Control	6.3025294	3.6790320	.325	-3.394348	15.999407
No Exposure	High Exposure	2.0565604	3.5809068	.939	-7.381687	11.494808
	Medium Exposure	-3.7815294	3.6790320	.734	-13.478407	5.915348
	NF Control	2.5210000	3.6790320	.902	-7.175877	12.217877
NF Control	High Exposure	-.4644396	3.5809068	.999	-9.902687	8.973808
	Medium Exposure	-6.3025294	3.6790320	.325	-15.999407	3.394348
	No Exposure	-2.5210000	3.6790320	.902	-12.217877	7.175877

Table 40

The one-way ANOVA test on the posttest index of each group determined whether there were significant differences between the groups after the experimental treatment had been applied to some of the groups. This test yielded a significance level of $p = 0.055$, slightly above the statistically significant level of $p < 0.05$. However, these results seem to support RH1, as this significance level is much lower than that of the pretest indexes, demonstrating that the treatment may have caused some differences in the posttest means. The results of this one-way ANOVA test are shown in Table 41.

Table 41

One-way ANOVA Test of Index Posttest Means Between Groups

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1016.358	3	338.786	2.658	.055
Within Groups	8412.019	66	127.455		
Total	9428.377	69			

Table 41

As the one-way ANOVA test does not tell us which groups were significantly different from the rest, a post-hoc Tukey test was performed to identify which groups had such a difference. The results of this test suggest that the Medium Exposure group had the greatest degree of difference with the other groups, including low levels of significance with the High Exposure group ($p = 0.065$) as well as the No-Facebook Control group ($p = 0.142$). These results also partially support RH1 in that the mean of a treatment group (the Medium Exposure group) had lower levels of significance overall than the two non-treatment groups. However, as the High Exposure group had greater levels of significance than the Medium Exposure group (showing more similarity to the other groups' posttest means), RH2 is not supported. Overall, this post-hoc analysis does show that changes occurred in some groups after the treatment was administered, partially answering RQ1 in that the treatment appears to have had some kind of effect. Table 42 shows the results of this post-hoc Tukey test.

Table 42

Post-hoc Tukey Test of One-way ANOVA Test of Posttest Indexes

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High Exposure	Medium Exposure	-9.5311734	3.7690175	.065	-19.465226	.402880
	No Exposure	-5.7495851	3.7690175	.428	-15.683638	4.184468
	NF Control	-1.1278204	3.7690175	.991	-11.061874	8.806233
Medium Exposure	High Exposure	9.5311734	3.7690175	.065	-.402880	19.465226
	No Exposure	3.7815882	3.8722973	.763	-6.424681	13.987858
	NF Control	8.4033529	3.8722973	.142	-1.802916	18.609622
No Exposure	High Exposure	5.7495851	3.7690175	.428	-4.184468	15.683638
	Medium Exposure	-3.7815882	3.8722973	.763	-13.987858	6.424681
	NF Control	4.6217647	3.8722973	.633	-5.584505	14.828034
NF Control	High Exposure	1.1278204	3.7690175	.991	-8.806233	11.061874
	Medium Exposure	-8.4033529	3.8722973	.142	-18.609622	1.802916
	No Exposure	-4.6217647	3.8722973	.633	-14.828034	5.584505

Table 42

RH3: Rating the Issue of Ignorance/Illiteracy

The third research hypothesis posited that participants exposed to higher levels of media concerning the issue of ignorance/illiteracy would rate the issue as more important than participants exposed to lower levels. On the posttest, participants were asked to rate seven issues in importance with 1 indicating "most important" and 7 indicating "least important". The mean rating of each group does not support RH3 in that the No Exposure group (M = 3.07) had the lowest rating, followed by the Medium Exposure group (M = 3.93) and the No-Facebook Control group (M = 4.14). The High Exposure group had the highest mean rating (M = 4.22), signifying that the participants in this group rated the issue of ignorance/illiteracy as less important than those in the other groups. Figure 35 shows the frequencies of the ratings for each group.

Table 43

Frequencies of Rating By Group

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
High Exposure	18	4.22	1.665	.392	3.39	5.05	1	7
Medium Exposure	14	3.93	1.385	.370	3.13	4.73	2	6
No Exposure	14	3.07	1.900	.508	1.97	4.17	1	7
NF Control	14	4.14	1.834	.490	3.08	5.20	1	7
Total	60	3.87	1.722	.222	3.42	4.31	1	7

Table 43

Although the mean ratings of the treatment groups do not support RH3, the differences between groups could still impact RH1 as the treatment may have had some effect. As the mean ratings for each group were relatively similar, a one-way ANOVA test was performed to determine if any of the group means were significantly different than the others. The results of this test are shown in Table 44.

Table 44

One-way ANOVA Test of Rating Between Groups

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	12.251	3	4.084	1.406	.251
Within Groups	162.683	56	2.905		
Total	174.933	59			

Table 44

The result of the one-way ANOVA test determined that the differences between the mean ratings of each groups was not significant at p = 0.251. This further does not support RH3 in that the treatment appears to not have caused significant differences in the ratings of the treatment groups. However, a post-hoc Tukey test was performed to better compared the ratings among the groups. The lowest level of significance (p = 0.242) was found to be between the mean ratings of the High Exposure and No Exposure groups. The No-Exposure and No-Facebook Control groups also had a relatively low significance level of p = 0.353. These results do not support RH3 in that exposure to the treatment may have caused the opposite effect of what was posited, as High and Medium Exposure group participants rated the issue of illiteracy/ignorance as less important than participants in the No Exposure group. However, RH1 is partially supported (although in a negative direction) by these results in that increased exposure to media about this issue may have in fact decreased the issue importance to participants. Table 45 shows the results of this post-hoc Tukey test.

Table 45

Post-hoc Tukey Test of One-way ANOVA Test of Group Ratings

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
High Exposure	Medium Exposure	.294	.607	.962	-1.31	1.90
	No Exposure	1.151	.607	.242	-.46	2.76
	NF Control	.079	.607	.999	-1.53	1.69
Medium Exposure	High Exposure	-.294	.607	.962	-1.90	1.31
	No Exposure	.857	.644	.548	-.85	2.56
	NF Control	-.214	.644	.987	-1.92	1.49
No Exposure	High Exposure	-1.151	.607	.242	-2.76	.46
	Medium Exposure	-.857	.644	.548	-2.56	.85
	NF Control	-1.071	.644	.353	-2.78	.63
NF Control	High Exposure	-.079	.607	.999	-1.69	1.53
	Medium Exposure	.214	.644	.987	-1.49	1.92
	No Exposure	1.071	.644	.353	-.63	2.78

Table 45

Research Question 2: Demographic Factors and Issue Salience

The second research question asked whether demographic factors influenced the issue salience of participants in the study. The first research hypothesis dealing with this question, RH4, posited that the level of education would play a role in the issue salience of participants. In other words, RH4 suggests that freshmen in college would be more likely to have a higher issue salience than participants in higher levels of college (sophomores, juniors, seniors, and graduate students). RH5, the second hypothesis dealing with RQ2, suggests that the gender of participants influences their issue salience. RH6 posits that religious affiliation may also affect the issue salience of participants. In order to test these hypotheses, Chi-Square tests of association were performed on the posttest scores of participants, comparing them with demographic categories. This statistical test sought to discover the relationship between the categorical variables of class, gender and religious affiliation and participants' responses on the posttest. The original scores from the posttest (as opposed to the transformed index) and their corresponding values (such as 5 = Extremely Important in Question 1/2) were used in order to satisfy the statistical test's requirement that both variables examined be either ordinal or nominal. Each question and the issue rating were evaluated according to the demographic characteristics of each group, which will be examined by question and research hypothesis.

RH4: Question 2

The posttest results for each group were tabulated and assessed with regards to the college level of the participants within each group. In order to satisfy the requirements of the Chi-square test of association, the possible responses were

categorized as ordinal variables with each response ("extremely important", "very important", etc.) considered as ranked categories. Figure 38 shows the breakdown of responses to Question 2 of the High Exposure group by class. Participants in each grade of this group rated the issue of illiteracy/ignorance in the top three categories of responses (important, very important, and extremely important).

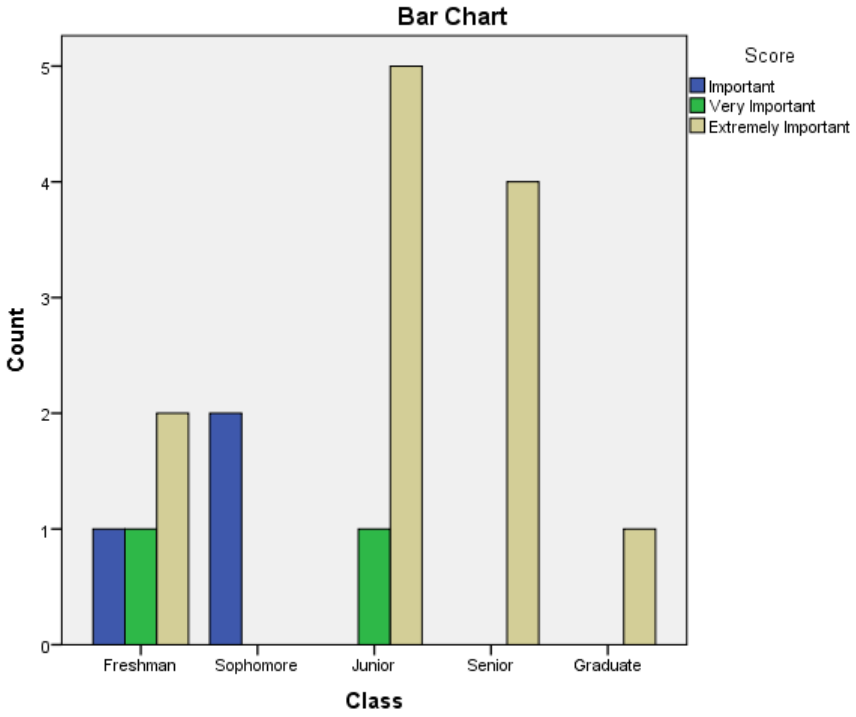


Figure 25: High Exposure Group Responses to Question 2 By Education Level

This analysis appears to contradict RH4 in that after exposure to the experimental treatment, more participants in the junior and senior years ranked the issue as more important than those in the sophomore and freshmen years. In this group, more students in the upper classes rated the issue as extremely important (83.3 % of participants in their junior year and 100 % of participants in their senior year) than both freshmen (50 %) and sophomores (0 %). A Chi-Square test of association was conducted on these results in order to determine if there was a statistically significant association between education level and these responses. The results are shown in Table 46.

Table 46

Chi-Square Analysis of High Exposure Group Question 2 According to Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.694[a]	8	.090
N of Valid Cases	17		

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .12.

Table 46

While not significant, Chi-Square(8) = 13. 694 and P = 0.090, indicating that there is a relatively strong association between education level and the posttest responses. Because of this P value, RH4 is not supported as the opposite effect occurred than predicted. Participants in this group with more time spent in college considered ignorance/illiteracy as more important than participants with less time spent in college. Participants in the Medium Exposure Group generally considered the issue as more important at all levels of college, with the posttest responses falling into either the "very important" or "extremely important" category. Figure 26 shows the chart of responses to Question 2 by class for this group.

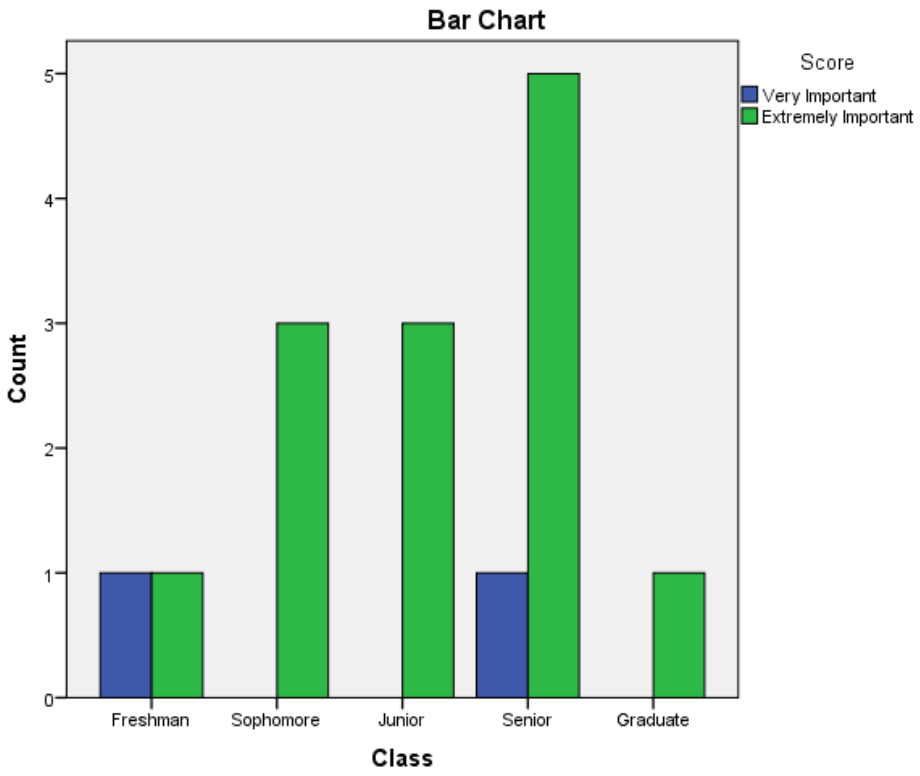


Figure 26: Medium Exposure Group Responses to Question 2 By Education Level

This graph shows that unlike the High Exposure group, participants in the Medium Exposure group did not show much variation by education level in their evaluation of the issue. Notably, the sophomore, junior, senior, and graduate classes all had high percentages of students ranking the issue as extremely important. However, these results also do not support RH4 in that the differences between education levels are not particularly present. A Chi-Square test for association was performed on this tabulation to determine if there was a statistically significant association between education level and response category for this group. The results of this test can be seen in Table 3 in Appendix B on page 195.

The results of the Chi-Square test for association of the Medium Exposure group, with Chi-Square(4) = 3.462 and P = 0.484, indicate that there is not a statistically significant association between the variables for this group. This does not

support RH4 as in this treatment group participants do not have significantly different responses by education level, but rather appear to consider the issue of ignorance/illiteracy important regardless of education level. The No Exposure group, unlike both the High and Medium Exposure groups, displayed more variation in the posttest responses, with no participants considering the issue as "very important". Figure 27 displays a graph of posttest responses by education level.

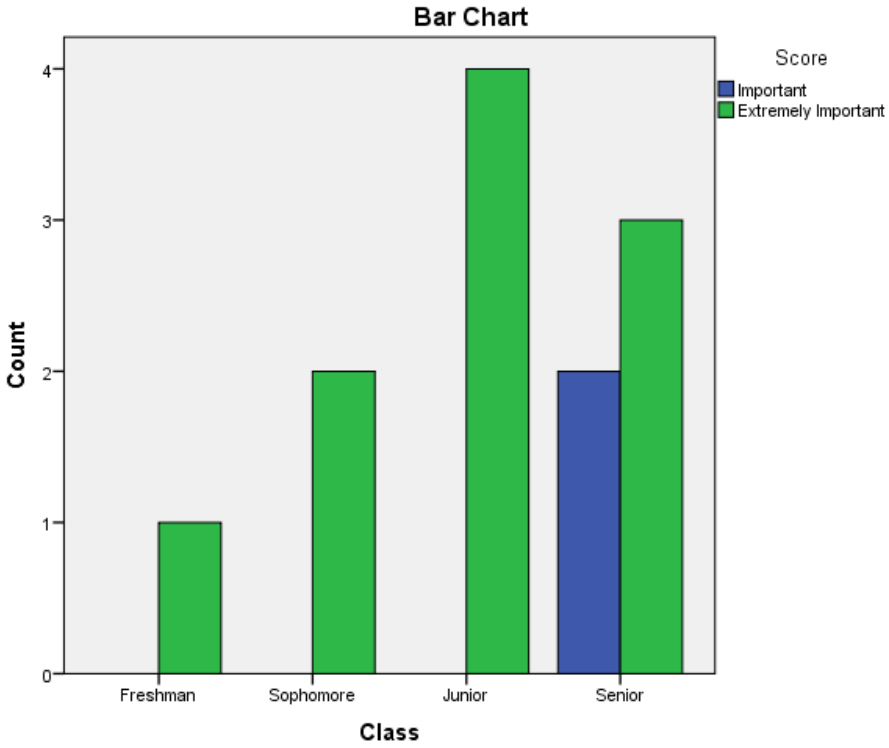


Figure 27: No Exposure Group Responses to Question 2 By Education Level

The results of this graph appear to partially support RH4 in that seniors displayed the most variation in responses, with 40 % regarding the issue as "important" and 60 % regarding the issue as "extremely important". Participants in lower education levels uniformly ranked the issue as "extremely important". However, as this treatment group did not receive media corresponding to the issue, the hypothesis is not supported by the data. A Chi-Square test of association was conducted on the responses to determine any statistically significant association between the variables. The results of this test can be seen in Table 5 in Appendix B on page 196.

As Chi-Square(3) = 3.360 and P = 0.339, there is no statistically significant association in the No Exposure group between posttest response to Question 2 and education level. This result partially supports RH4 as this group, with no exposure to the treatment issue, displays a lack of association between education level and issue importance. Thus, as the High Exposure group displays a lower level of significance (P = 0.090), the application of the treatment may have had a different impact on different levels of education. However, RH4 is not supported in that this change occurs in the opposite direction than predicted, with older students ranking the issue as more important. In order to further support the hypothesis, the results of the No-Facebook Control group should also show a lower level of association than the treatment groups. Figure 44 shows the tabulation of posttest responses in the No-Facebook Control group by education level for Question 2.

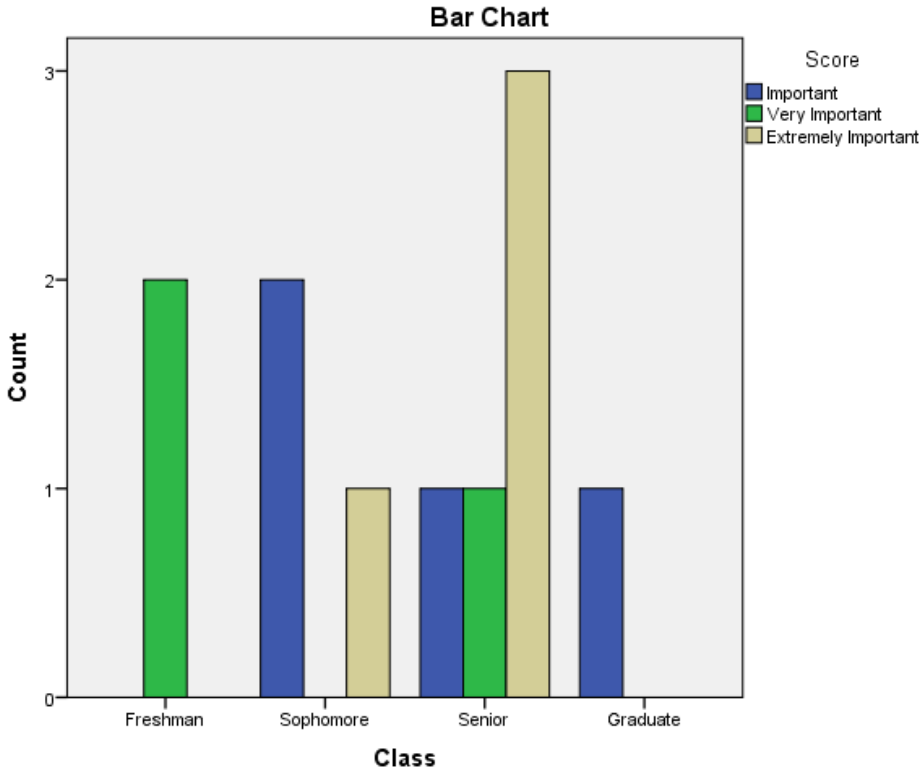


Figure 28: No-Facebook Control Group Responses to Question 2 By Education Level

The graph in Figure 44 indicates that much like in the High Exposure group, participants in the group with no exposure to stimuli naturally had higher proportions of students in higher classes ranking the issue as "extremely important". A Chi-Square test of association was performed to see if there was a statistically significant association between the two variables existing independently of experimental treatment. Table 47 displays the result of this test.

Table 47

Chi-Square Analysis of No-Facebook Control Group Question 2 According to Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.900[a]	6	.129
N of Valid Cases	11		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .27.

Table 47

With a Chi-Square(6) of 9.9 and P = 0.129, the results indicate that even without treatment there is low but non-statistically significant association between education level and issue importance as determined by Question 2. Thus, the overall data for Question 2 do not support RH4, as it shows that higher levels of time spent in college (education level) was associated with high salience, opposite to what the hypothesis predicted. However, RQ2 is partially answered by these results in that participants in the High Exposure group in higher education levels attributed more importance to the issue, revealing an association between demographic factor and salience. Tabulations of the posttest results by class for each group (Tables 1 - 6) are available in Appendix B on pages 193 - 196. The concentration of greater issue importance among older students is clearly visible in these tables.

RH4: Question 4

Question 4 asked participants how much candidates in the parliamentary elections should worry about the issue of ignorance/illiteracy in Egypt. In order to test whether students from lower education levels would be more prone to change in issue salience than those in upper classes (RH4), tabulations of posttest responses and Chi-Square tests of association were run on the data from each group. These associations were calculated between the category of responses ("worry not at all", "worry a little", "worry some", and "worry a lot") and the class level in college of the participants. In order for RH4 to be supported, the data should reveal a larger percentage of participants in lower levels (freshmen and sophomores) than upper levels (juniors and above) choosing that candidates should "worry a lot" about the issue. Thus, tabulations of responses for each group were calculated according to education level. The graph of posttest responses for the High Exposure group is shown in Figure 29.

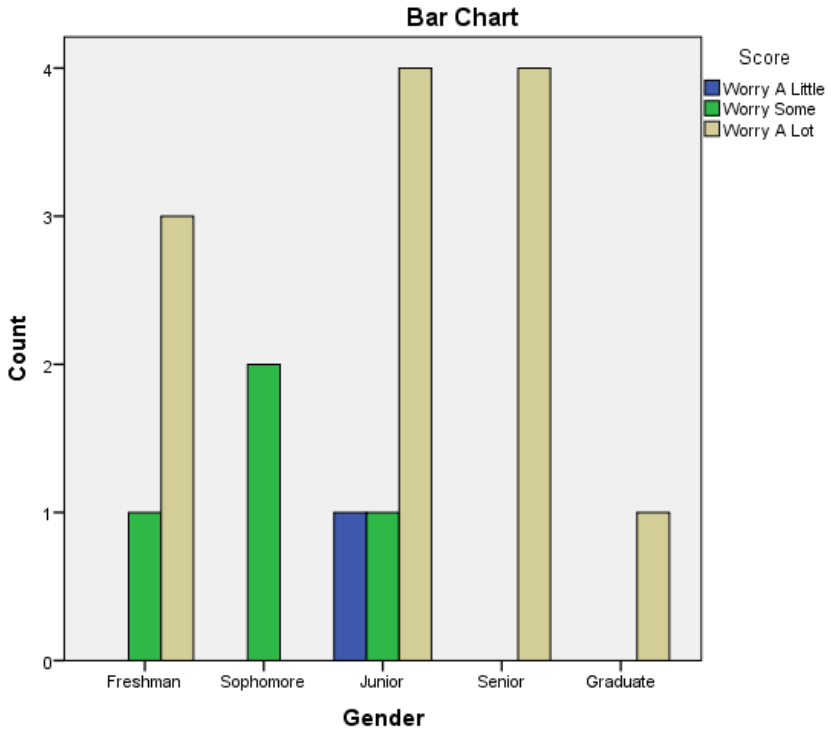


Figure 29: High Exposure Group Responses to Question 4 By Education Level

The posttest responses of the High Exposure group indicate that participants across education levels considered that candidates should worry about the issue of ignorance/illiteracy. However, the freshmen, sophomore, and junior classes considered that candidates should worry less about the issue overall than did the senior and graduate classes (with 100 percent saying candidates should "worry a lot". This does not support RH4, as students in upper levels seem to have had more salience than those in lower levels. A Chi-Square test of association was performed to determine if the association between education level and the posttest responses was statistically significant. The results of this test can be seen in Table 8 in Appendix B on page 197.

With Chi-Square(8) = 10.153 and P = 0.254, the differences by education level are not statistically significant at the level of $P < 0.05$. Thus, in addition to not supporting RH4, this result partially answers RQ2 in that education level does not seem to have any bearing on the salience of the issue for different participants. However, as seen in Question 2, there still seems to be some level of association between upper levels and concern about the issue. This pattern does not occur in the Medium Exposure group, according to the graph of the data as seen in Figure 30.

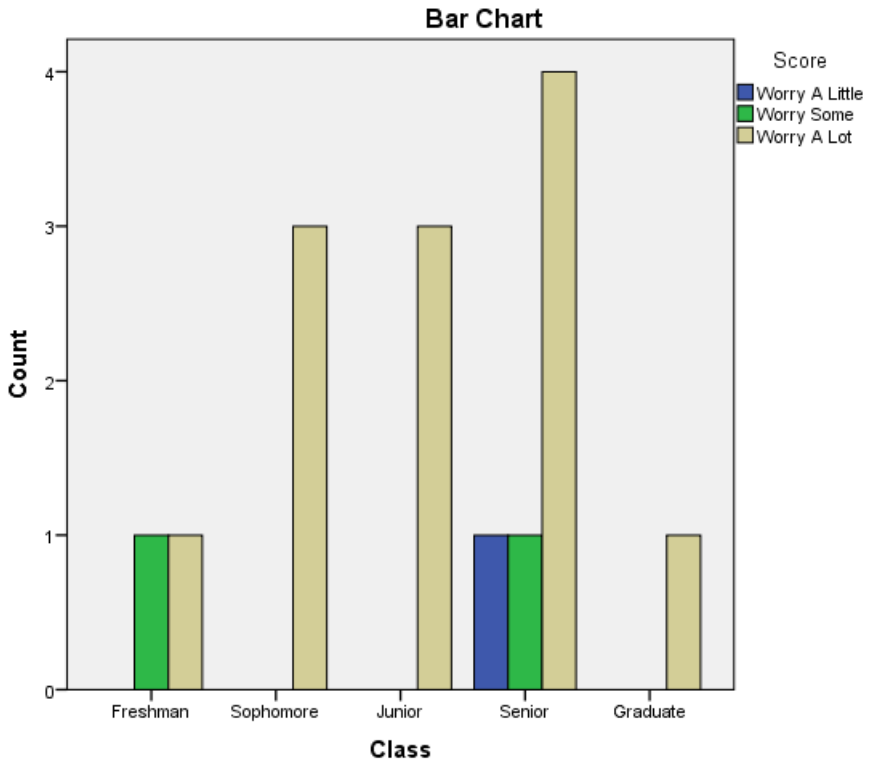


Figure 30: Medium Exposure Group Responses to Question 4 By Education Level

In this group, variation of responses occurs in the senior class, with some participants choosing that candidates should "worry a little" or "worry some" about the issue. The spread of responses partially supports RH4 in that sophomores and juniors were more likely to consider that candidates should "worry a lot" about the issue than seniors. A Chi-Square test of association was conducted to determine if this association was statistically significant. The results of this test can be seen in Table 10 in Appendix B on page 198.

As Chi-Square(8) = 5.208 and P = 0.735, the association between senior participants having more variation than lower levels is not statistically significant at $P < 0.05$. RH4 is not supported as this association has a high P score, meaning the association between the two variables is relatively weak. Furthermore, the data partially answers RQ2, as there is no association between the demographic factor of

class level and the responses of participants (issue salience). The No Exposure group has a similar spread of results, with the senior class exhibiting the most variation in responses. The graph of the posttest responses for the No Exposure group is shown in Figure 31.

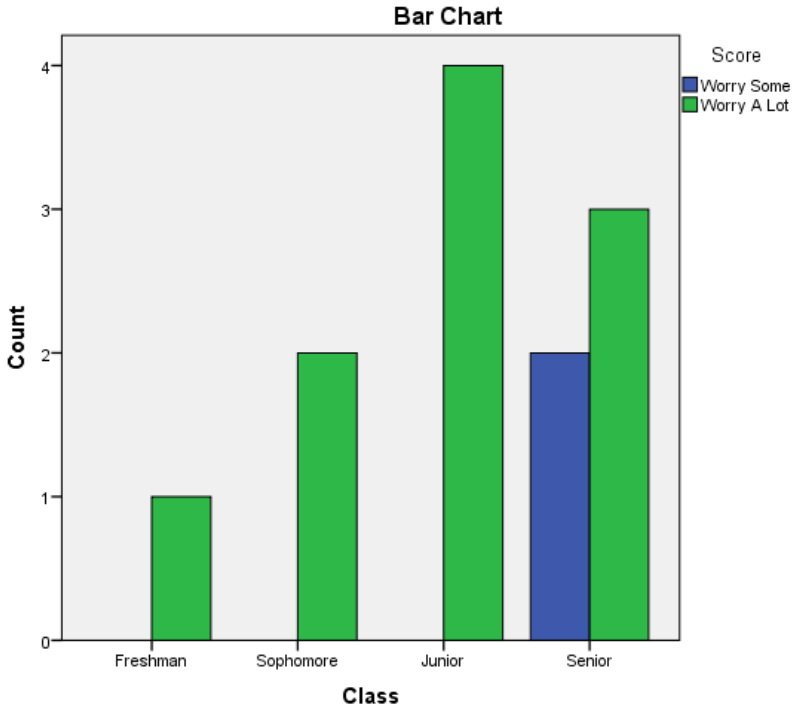


Figure 31: No Exposure Group Responses to Question 4 By Education Level

As in the Medium Exposure group, the senior class had fewer participants who considered that candidates should "worry a lot" about the issue (60 percent). As this group did not view media pertaining to the issue, the differences between the two groups cannot be attributed to the education level and does not support RH4. A Chi-Square test of association was performed to see if this association was also not statistically significant. The results of this test can be seen in Table 12 in Appendix B on page 199.

With Chi-Square(3) = 3.360 and P = 0.339, the No Exposure group did not have a statistically significant association between education level and posttest response. This result supports RH4 in that the group was not exposed to the treatment

condition and should not exhibit any association at the significance level of $P < 0.05$. The responses of the No-Facebook Control group were also tabulated according to class level, as seen in Figure 52. As in the High Exposure group, many participants in the sophomore class thought that candidates should "worry some" about the issue (66.7 percent), while all of the participants in the senior class thought candidates should "worry a lot".

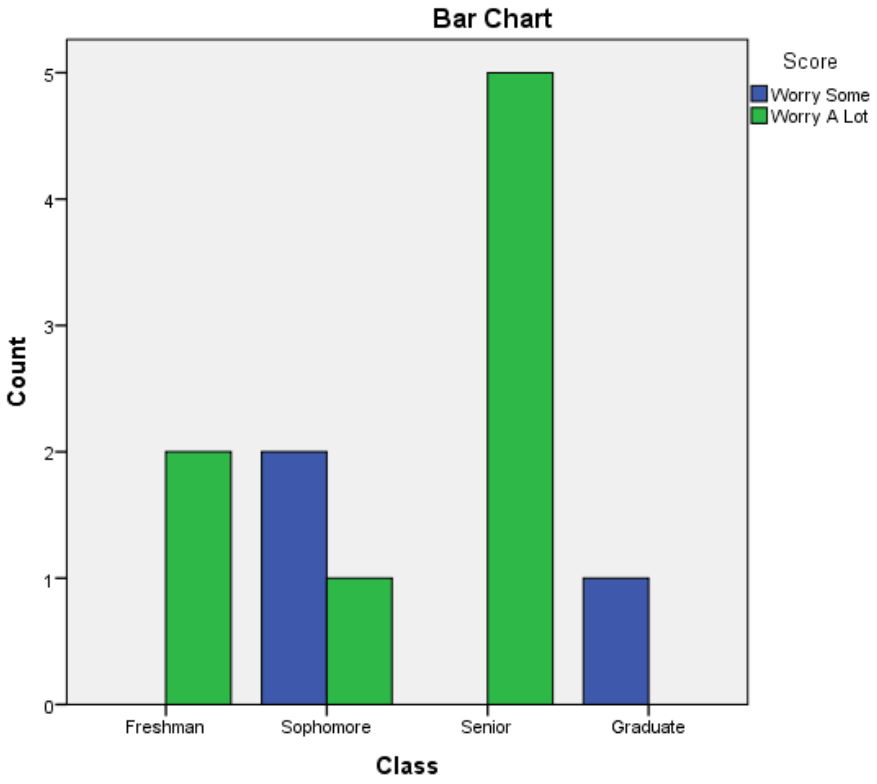


Figure 32: No-Facebook Control Group Responses to Question 4 By Education Level

As this group had a high concentration of participants in the senior class and fewer participants in the lower classes (including no juniors), the responses may be less representative than in the other groups. This data does not support RH4 in that variation occurs in both the lower and upper levels, as both sophomores (66.7 percent) and graduate students (100 percent) rated that candidates should "worry some" about the issue. A Chi-Square test was performed to see if the association between these

class levels and the posttest responses was a statistically significant association. The results are shown in Table 48.

Table 48

Chi-Square Analysis of No-Facebook Control Group Question 4 According to Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.639[a]	3	.054
N of Valid Cases	11		

a. 8 cells (100.0%) have expected count less than 5. The minimum expected count is .27.

Table 48

As Chi-Square(3) = 7.639 and P = 0.054, there is an almost statistically significant association between level of education and posttest response in the group without exposure to any form of treatment. This result indicates there is a naturally strong association between class level and the responses to Question 4, in that certain classes rated the issue differently as a result of class level. These results support RH4 and partially reinforce the importance of the association in the High Exposure group, as this association could signify that different class levels have different levels of issue salience. Tabulations of the posttest responses by class and the Chi-Square tests (Tables 7 - 14) are available in Appendix B on pages 197 - 201.

RH4: Question 5

The third measure of the posttest determined issue salience via how much participants talked about the issue with others. The possible responses included talking "not at all", "rarely", "sometimes", "frequently" and "almost every day" about the issue of ignorance/illiteracy. These responses were tabulated by class and Chi-Square tests of association were conducted between kind of response and class level.

RH4 would be supported by this measure if freshmen and sophomores (lower classmen) are more likely to "talk almost every day" about the issue than juniors, seniors, and graduate students (upper classmen). RH4 is not supported if lower level participants exhibit more variation in responses than participants in higher levels. A tabulation of responses from the High Exposure group for Question 5 appears to not support RH4, as variation occurs in the freshmen class, with 50 percent talking "frequently" about the issue as opposed to the senior class (75 percent). Figure 33 shows the graph of posttest responses to Question 5 for the High Exposure group.

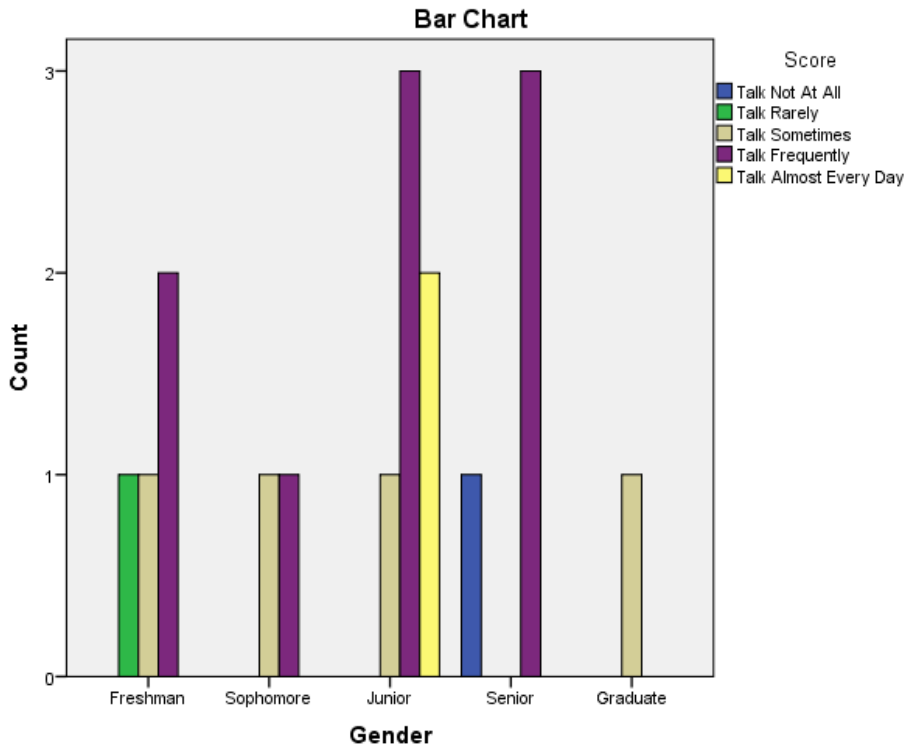


Figure 33: High Exposure Group Responses to Question 5 By Education Level

This graph suggests that RH4 is not supported, for the freshmen class had participants who talked "rarely" and "sometimes" (50 percent of the class) about the issue, while the junior class had 83 percent of participants talking "frequently" or "almost every day" about the issue. The variation at a lower level of issue salience (in this case the degree that students talked about the issue) in the freshmen class contradicts RH4 as this variation was predicted to occur amongst students with more college experience.

A Chi-Square test of association was conducted on the tabulation of responses to determine whether there was a statistically significant association between the type of response and class level. The results of this test can be seen in Table 16 in Appendix B on page 202.

At Chi-Square(16) = 15.229 and P = 0.508, the association between education level and posttest response is not significant. This does not support RH4 in that the demographic factor of level in college does not have any association with the responses. RQ2 is also partially answered in that this demographic factor does not appear to play a role in how much participants talked about the issue, one of the measures for determining issue salience. The tabulation of responses to Question 5 for the Medium Exposure group reveals that this group also exhibits a similar spread of responses by class as in the High Exposure group. Figure 34 shows how the frequency of talking about the issue increases by class.

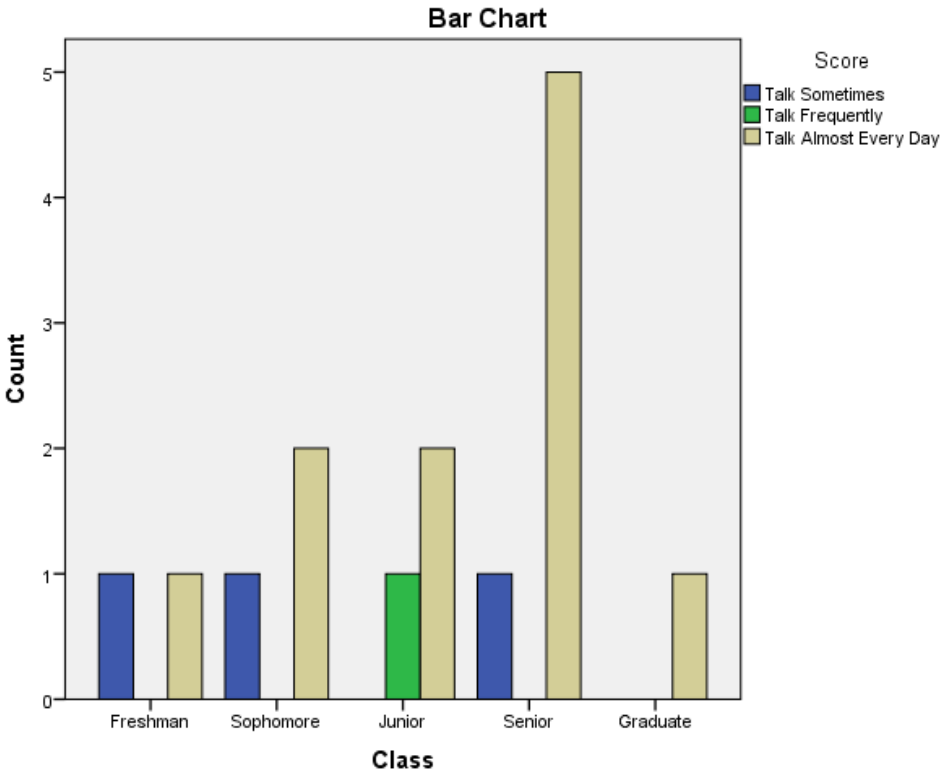


Figure 34: Medium Exposure Group Responses to Question 5 By Education Level

As in the High Exposure group, the percentage of participants in each grade who rated the issue most important increases as class level increases. This does not support RH4 as the opposite pattern is predicted, with participants in lower class levels finding the issue more important. A Chi-Square test of association was performed on the tabulation of results in order to determine if there was a statistically significant association between class level and the posttest responses at $P < 0.05$. The results of this test can be seen in Table 18 in Appendix B on page 203.

With Chi-Square(8) = 6.364 and P = 0.607, the association in this treatment group is also not statistically significant. This does not support RH4 in that class level appeared to have no significant influence on how much participants talked about the issue. While the data contradicts RH4 as the predicted variation occurs among lower class levels, the association is not significant. Education level thus does not appear to influence this measure and by extension issue salience. According to RH4, the No Exposure and No-Facebook Control groups should also have an association by level of education. Figure 35 displays the graph of responses by education level for the No Exposure group.

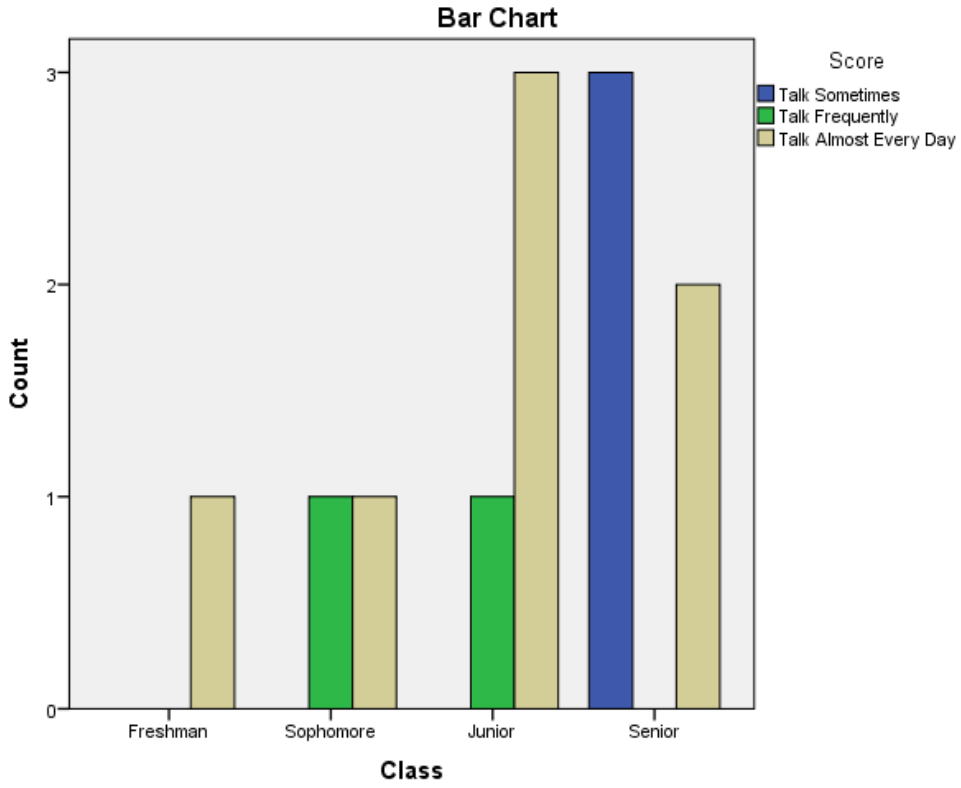


Figure 35: No Exposure Group Responses to Question 5 By Education Level

Although the No-Exposure group did not receive any treatment, the class with the greatest variation is the senior class, with 60 percent talking "sometimes" about the issue and 40 percent talking "almost every day" about the issue. While the data is in line with RH4's prediction, as this group received no issue-specific treatment during the experiment this association may occur naturally. A Chi-Square test of association was performed to see if this natural association between class level and response is statistically significant at $P < 0.05$. The results of this test can be seen in Table 20 in Appendix B on page 204.

As Chi-Square(6) = 7.500 and P = 0.277, the association between class level and response is not statistically significant. This indicates that the natural variation in seniors' posttest responses does not depend on the participants' level of education. This partially answers RQ2 in that the demographic factor of education level does not play a natural role in determining the response of a participant. In other words, in

order to support RH2, the results of the No Exposure group should show an association between class level and posttest response. However, while the High Exposure group had P = 0.508, and the Medium Exposure group had P = 0.607, the No Exposure group had a much lower P = 0.277. This supports RH1 also as the association between salience and a demographic factor increases in a non-treatment group, indicating that participants were affected by treatment. A graph of the posttest responses for this group is shown in Figure 36. These results appear to show that variation does occur in both the lower and upper class levels, with 50 percent of freshmen and 60 percent of seniors talking "almost every day" about the issue. While participants in the junior year of college are not represented, both younger classes (freshmen and sophomores) and older classes (seniors and graduate students) have participants who talk frequently and participants who do not talk frequently about the issue.

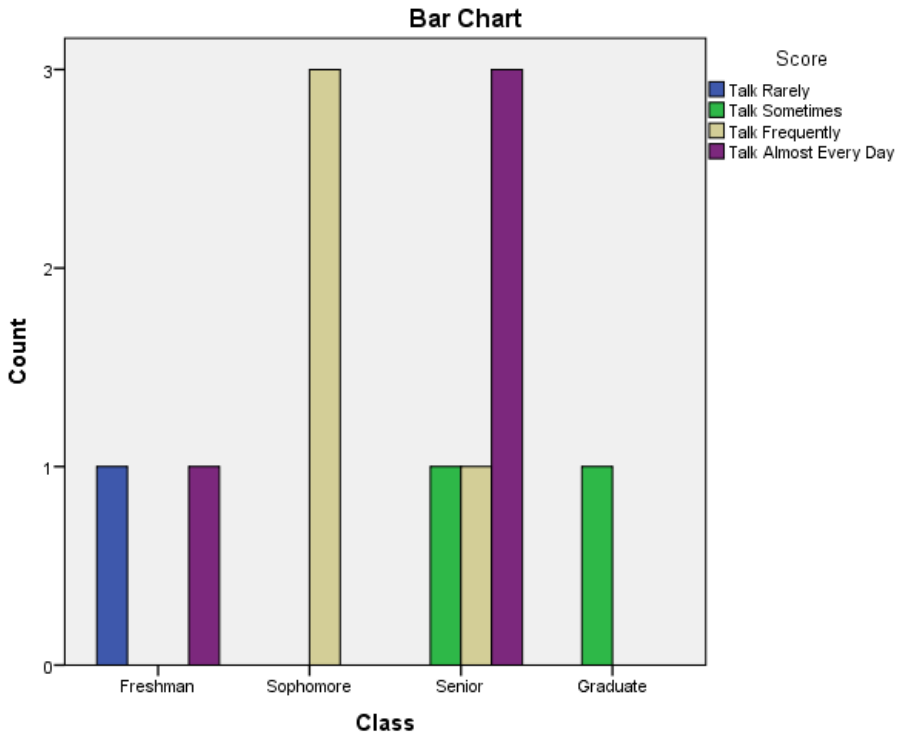


Figure 36: No-Facebook Control Group Responses to Question 5 By Education Level

The variation in the posttest responses among groups seems to suggest that participants in the control group (with the exception of 100 percent of sophomores who talked "frequently" about the issue) did not have a natural association with a particular response or degree of salience. A Chi-Square test of association between education level and posttest response was calculated to determine whether the responses were associated with a particular class. Table 49 shows the results of this test.

Table 49

Chi-Square Analysis of No-Facebook Control Group Question 5 According to Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.225[a]	9	.062
N of Valid Cases	11		

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .09.

Table 49

With Chi-Square(9) = 16.225 and P = 0.062, this test reveals that there was a relatively low probability that the participants in a certain class chose a particular response. While not statistically significant at the level of $P < 0.05$, the small P value indicates that without exposure to the treatment or manipulation on Facebook, participants naturally chose certain responses. With the lowest P value of all of the groups, the No-Facebook Control group partially supports RH4 as it was the group with the most varied scores among participants in higher classes. The tabulations of data for each group show how in the Medium and High Exposure groups talking frequently about the issue was more common proportionally for upper class students. In the No Exposure and No-Facebook Control groups, the concentration is in the opposite direction. Tabulations of the data for Question 5, including respondent count

tables and the Chi-Square tests (Tables 15 - 21), can be found in Appendix B on pages 202 - 205.

RH4: Index Score

The scores for each measure were added up for each participant into an index score comprised out of 14 points, which was then multiplied by 7.1429 to produce a net score out of 100. However, in order to analyze the effect of class level on the posttest index, the data had to remain as possible scores out of 14 as an ordinal variable. The index scores were tabulated for each treatment group by class, and Chi-Square tests of association were performed to determine if education level was significantly associated with any pattern of responses. The graph of index scores by education level for the High Exposure group is displayed in Figure 37.

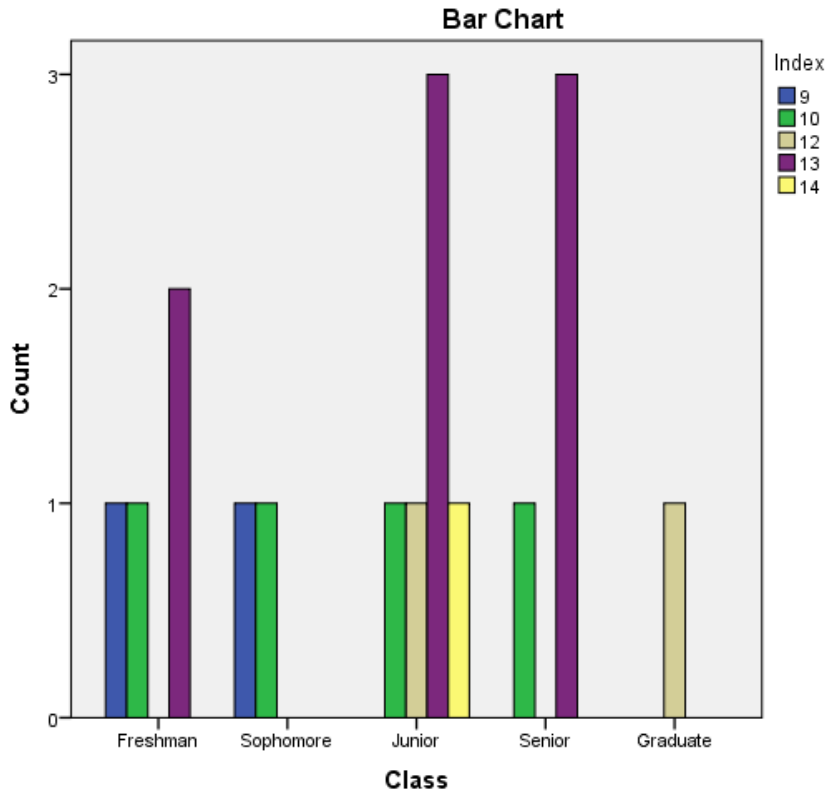


Figure 37: High Exposure Group Index Scores By Education Level

Across class levels, participants had similar distributions of index scores. Both lower and upper levels had approximately half of participants receiving a score of 13 (50 percent of freshmen and juniors and 75 percent of seniors). While the junior class had the most participants ranking the issue lower than other levels (9 and 10), the results do not seem to support RH4 in that participants with lower levels of education did not have index scores higher than those in higher levels. A Chi-Square test of association was performed to determine if there was a statistically significant association between this distribution of scores and class level. The results of this test are shown in Table 23 in Appendix B on page 206.

With Chi-Square(16) = 17.177 and P = 0.374, there is no significant association between class level and index score for the High Exposure group. This does not support RH4 as the hypothesis predicts that differences should occur among classes, yet the posttest index scores seem similar across class levels. RQ2 is partially answered by these results as well, for level of college education does not seem to play a significant role in the issue salience of Facebook users. RH4 predicts that the Medium Exposure group will show an association between class level and index score as the second of the treatment groups. The graph of index scores for this group is shown in Figure 38.

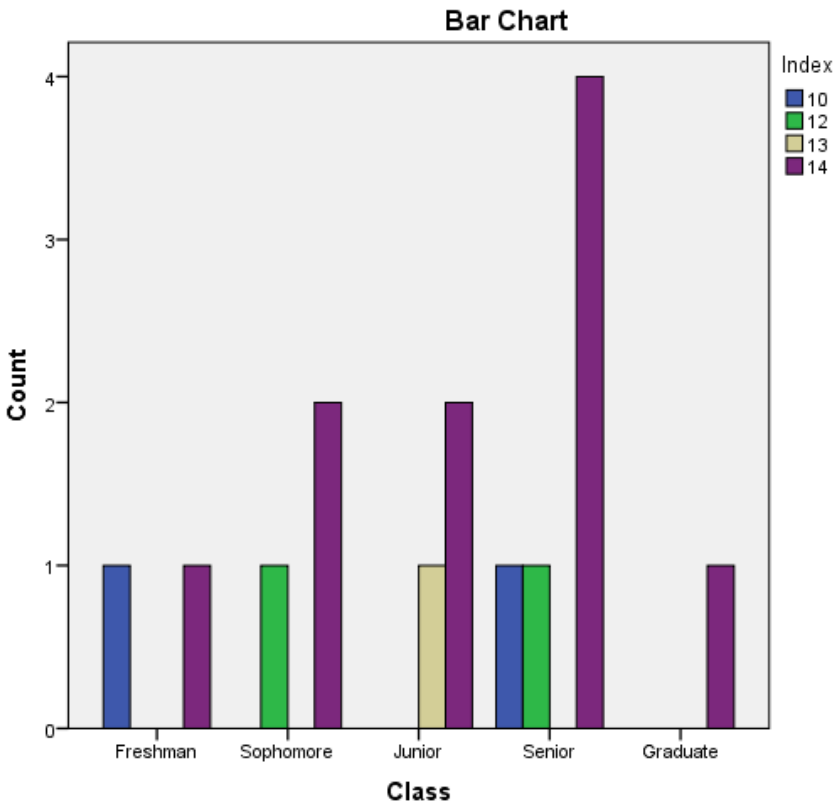


Figure 38: Medium Exposure Group Index Scores By Education Level

While a greater proportion of participants in this group received the highest index score of 14 (meaning the highest amount of concern for the issue), the class levels share similar distributions of index scores as in the High Exposure group. 66.7 percent of sophomores, juniors, and seniors all received the highest score of 14, while 50 percent of freshmen scored the same. As higher percentages of upper classes had scores reflecting higher issue salience, RH4 is not supported. In other words, the second treatment group also does not support RH4 as the distribution of index scores of participants in lower classes did not vary greatly from the scores of participants in higher classes. A Chi-Square test of association was conducted to determine if these scores were significantly associated with class level. Table 25 in Appendix B on page 207 shows the results of this test.

This result does not support RH4 as Chi-Square(12) = 9.000 and P = 0.703, indicating there is no statistically significant association between class level and index score for this group. As in the High Exposure group, participants did not produce much variation across class levels with regards to the cumulative posttest scores. RQ2 is again partially answered as the demographic factor of class level in college does not impact the salience held by individuals in the group. For the No Exposure and No-Facebook Control group, RH4 predicts an association between class level and index score as in the treatment groups. Participants in the No Exposure group received similar index scores to those in the High Exposure group, ranging from 9 to 14. Figure 39 shows the graph of results for this group.

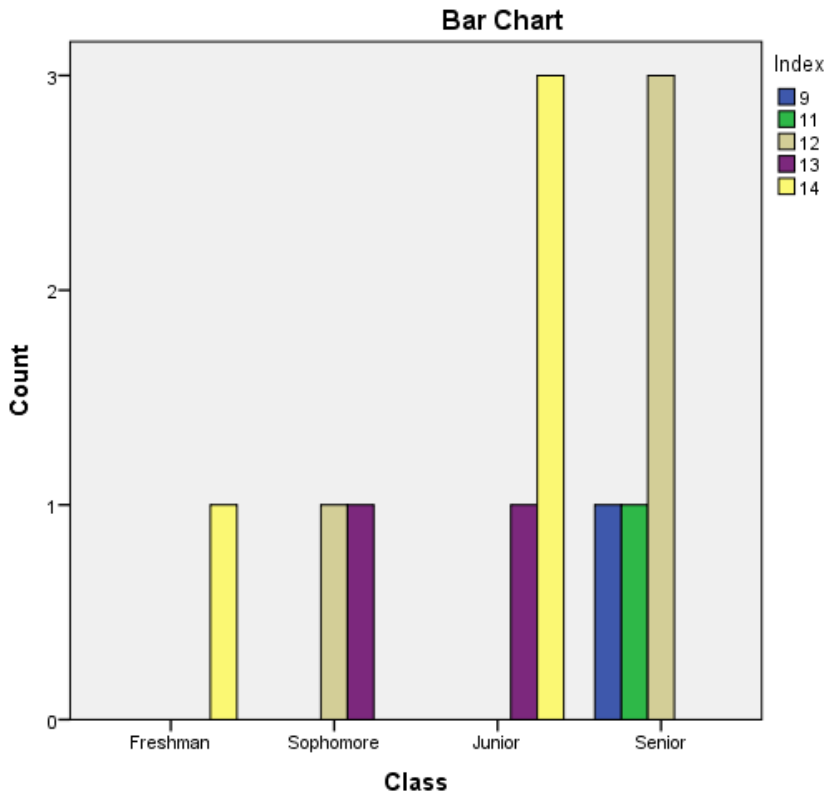


Figure 39: No Exposure Group Index Scores By Education Level

Although many participants felt strongly about the issue, fewer participants in the No Exposure group received a score of 13 or above (50 percent compared with 53 percent

of the High Exposure group and 73.4 percent of the Medium Exposure group). The index scores of the senior class were concentrated in a lower score range than those of the other groups, with 100 percent of respondents receiving a score of 12 or below. A Chi-Square test of association was performed to determine if an association between the overall scores and class level existed in a group not exposed to the treatment. Table 27 in Appendix B on page 208 shows the results of this test

With Chi-Square(12) = 13.950 and P = 0.304, the results indicate that there is not a statistically significant association between index scores and class level for this group. This result does not support RH4 in that no association is present between class level and overall issue salience. The No-Facebook Control group should also show an association by class level. A graph of index scores by class level for this group is displayed in Figure 40.

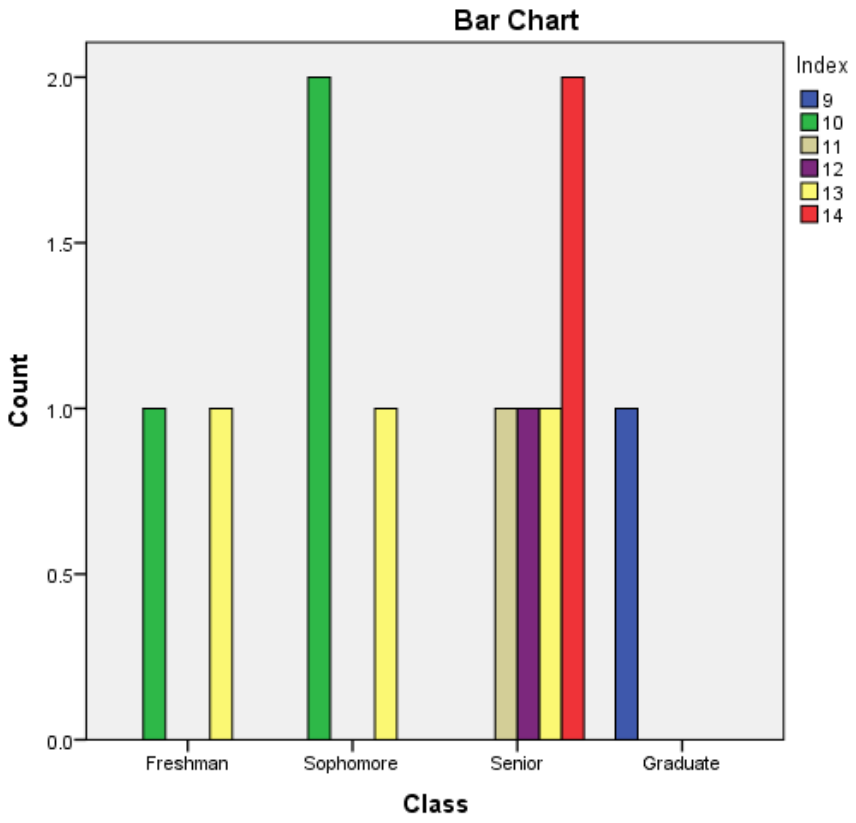


Figure 40: No-Facebook Control Group Index Scores By Education Level

As in the other groups, participants in this group received index scores in the range of 9 to 14. Unlike in the No Exposure group, participants in the senior class had higher values overall, with 60 percent receiving a score of 13 or above. Variation in index scores occurs at all class levels, indicating that even without treatment the issue salience varied by individual. In order to test whether any associations between class level and scores appeared without treatment, a Chi-Square test of association was conducted. The results of this test may be seen in Table 29 on page 209 in Appendix B.

These results do not support RH4 as Chi-Square(15) = 19.311 and P = 0.200, demonstrating that there is no statistically significant association between class level and index score. As both the High and Medium Exposure groups also display no significant association, RH4 is not supported by the overall index scores of participants. This partially answers RQ2 in that participants in treatment groups did not have certain issue salience based on the demographic factor of level of education. Tabulations of these scores by class and the Chi-Square tests (Tables 22 - 29) , found in Appendix B on pages 206 - 209, clearly show this lack of variation.

RH4: Rating

In order to further test RH4, the posttest ratings for the issue of ignorance/illiteracy in Egypt were tabulated by class level to determine if certain classes had different levels of issue salience. Participants in each group were asked to rank seven issues in importance, with 1 indicating "most important" and 7 indicating "least important". In order to support RH4, more participants in the lower classes (freshmen and sophomores) should rank the issue with lower ratings, signifying higher levels of importance of the issue. The ratings were tabulated by treatment

group and class level, and Chi-Square tests of association were performed to determine if the association between the rating and class level was statistically significant. Figure 41 shows a graph of rating scores for the High Exposure group by class level.

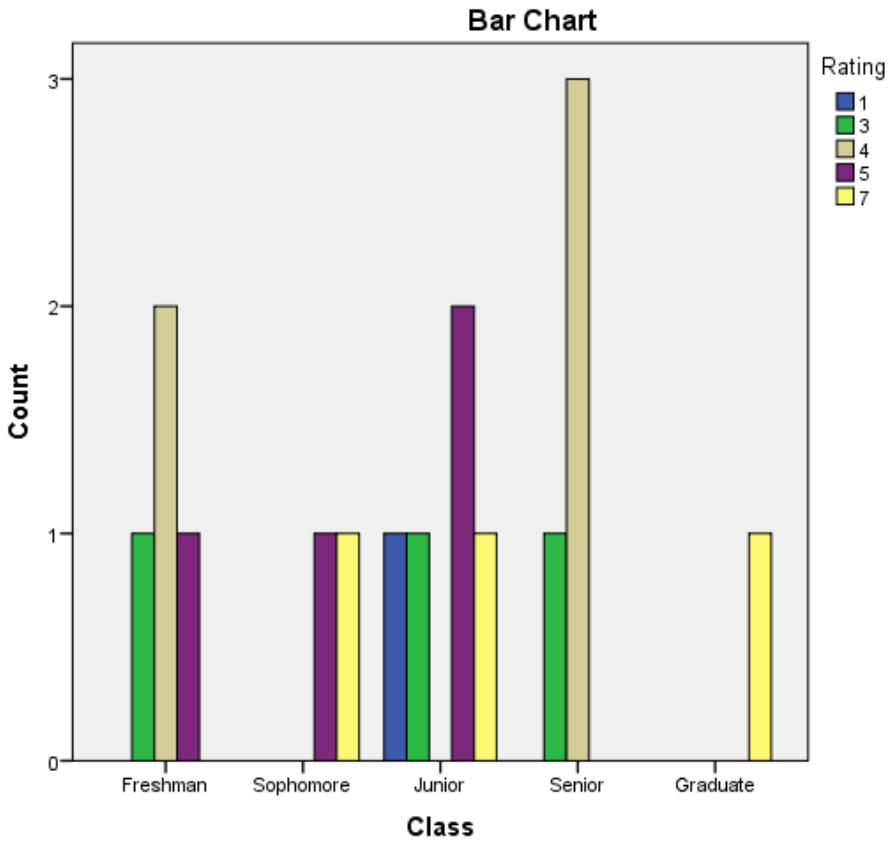


Figure 41: High Exposure Group Rating Scores By Education Level

This graph shows that both lower and upper classes had participants who ranked the issue of ignorance/illiteracy as "most important" and also "least important". Participants in the junior class had the largest percentage of participants rating the issue as important, with 40 percent of participants ranking the issue either 1 or 3. As the freshmen and senior classes have similar distributions of ranking scores, RH4 is not supported by the data. Despite exposure to the highest level of treatment, there does not seem to be an association between ranking score and class level. A Chi-

Square test of association was conducted to verify that this association did not exist. Table 31 in Appendix B on page 210 shows the results of this test

With Chi-Square(16) = 16.600 and P = 0.412, there is not a statistically significant association between ranking score and class level in the High Exposure group. This does not support RH4 as no class level is associated with participants' rating of the issue importance. As there is no association, RQ2 is also partially answered in that there are no significant differences by class level. A graph of the ranking scores by class was prepared for the Medium Exposure group, as seen in Figure 42. No participants in this group gave the issue a score of 1 or "most important", and the senior class had the highest proportion of participants ranking the issue as 3 or above (60 percent).

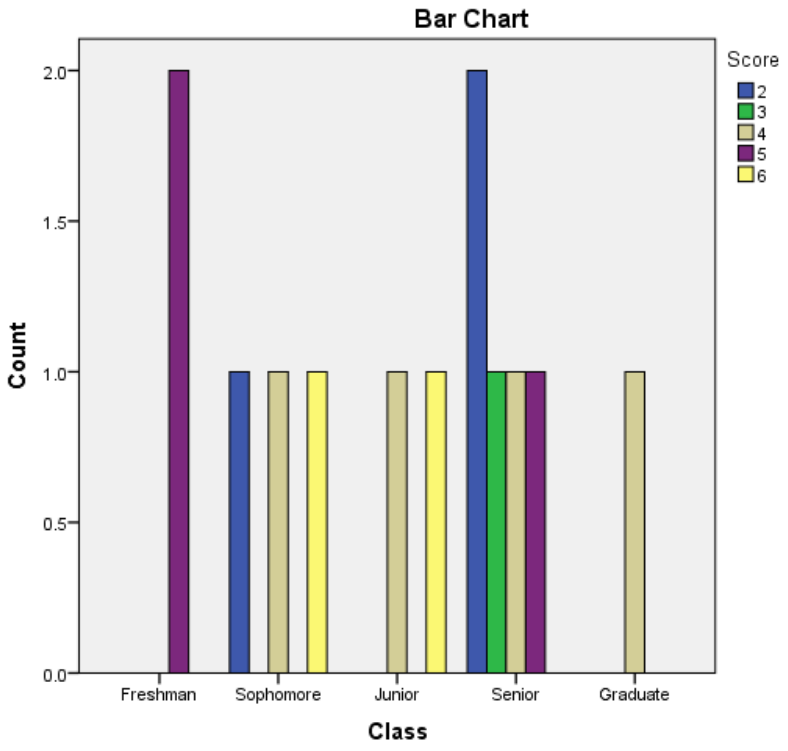


Figure 42: Medium Exposure Group Rating Scores By Education Level

As the concentration of higher scores (meaning less salience) occurs in the senior class, RH4 is not supported by this data. These higher scores were predicted to occur

amongst lower classes if the treatment had an effect that varied by class level. A Chi-Square test of association was performed to determine whether the association of higher scores with upper classes was statistically significant. The results of this test are found in Table 33 on page 211 in Appendix B.

Similar to the High Exposure group, with Chi-Square(16) = 16.069 and P = 0.448, there is no statistically significant association between rating score and class level. This does not support RH4 as the association predicted does not occur, indicating that the treatment did not have a different effect by class level. This also partially answers RQ2 in that the demographic factor of class level does not seem to affect how participants responded to the experimental treatment. Both the No Exposure group and the No-Facebook Control group should have a significant association between education level and rating score in order to support RH4. A tabulation of the rating scores by class was constructed for the No Exposure group, visible in Figure 43.

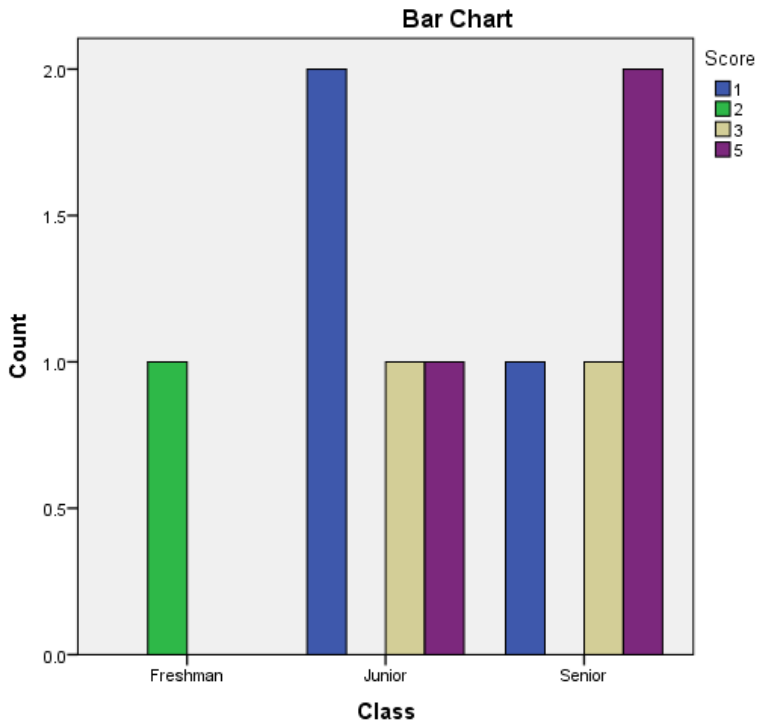


Figure 43: No Exposure Group Rating Scores By Education Level

Although this group had fewer class levels than in the other groups, the No Exposure group had the highest proportion of participants who ranked the issue 1 or "most important" (33.3 percent) of all the groups. However, only 9 out of 17 participants in the group completed this question successfully, and thus this tabulation may not accurately portray a complete idea of the issue agenda of participants. A Chi-Square test of association was performed on this data to determine if the association between these higher scores and class level was statistically significant. The result of this test is displayed in Table 50.

Table 50

Figure 75: Chi-Square Analysis of No Exposure Group Rating Score According to Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.750[a]	6	.136
N of Valid Cases	9		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .11.

Table 50

Although with Chi-Square(6) = 9.750 and P = 0.136 the association has a lower probability of being a result of chance, the association is not significant at P being less than 0.05. While the P value is lower than that of the treatment groups, the association contradicts RH4 as participants with higher levels of education had higher issue salience. The No-Facebook Control group, also with no exposure to the issue, was predicted to also have an association between class level and rating score of the issue importance. A graph of the rating scores by class for this group was calculated, visible in Figure 44.

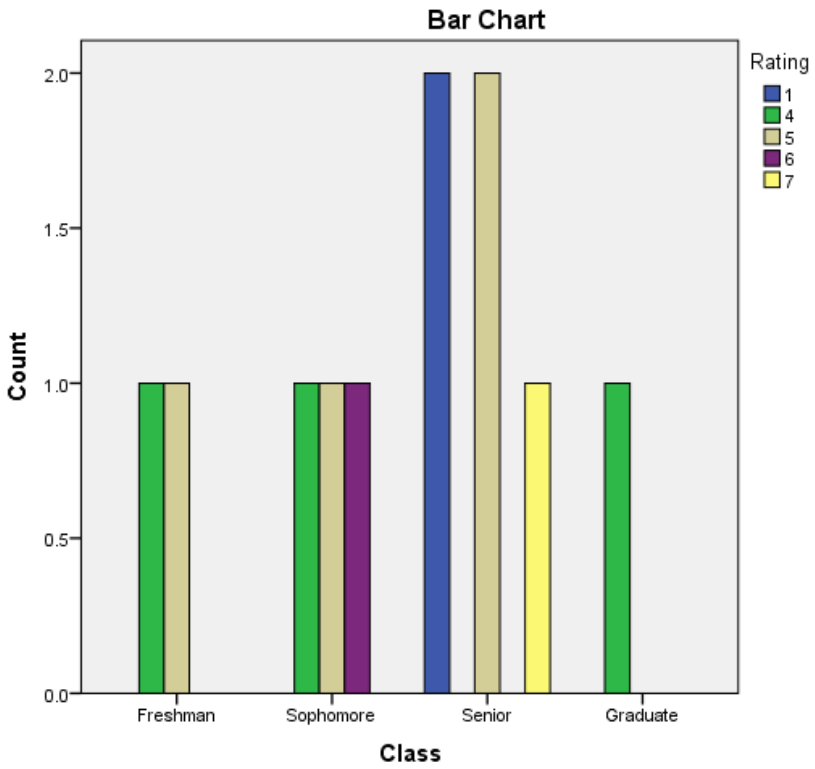


Figure 44: No-Facebook Control Group Rating Scores By Education Level

While each class level in this group had some participants who ranked the issue as "less important" with scores from 4 to 7, only the senior class had participants who ranked the issue as "most important" with a score of 1 (40 percent). Older students in college may thus have a higher level of importance of the issue naturally than younger students, not supporting RH4. A Chi-Square test of association was performed on the variables of class level and rating score to determine whether this association was statistically significant at $P < 0.05$. The results are shown in Table 36, found on page 213 in Appendix B.

As Chi-Square(12) = 10.481 and P = 0.574, there is no statistically significant association between class level and rating score for participants without exposure to any form of experimental treatment other than the pretest. The lower P values of 0.412 in the High Exposure group and 0.448 in the Medium Exposure group may indicate that level of education determined issue salience to a small degree. However,

as the values are not significant this demographic factor may only play a small role in issue salience. Tabulations of each group by class and Chi-Square tests (Tables 30 - 36), as displayed in Appendix B on pages 210 - 213 , show how variation among rating scores occurs within each class level regardless of treatment group. With the exception of the No Exposure group, each group appears to have experienced similar variations by class, which does not support RH4.

RH5: Gender

In order to answer RQ2, gender was identified as another demographic factor that may affect issue salience. RH5 posits that gender influences salience, and in order for this hypothesis to be supported, the data should show a significant association between gender of respondents and their responses to the measures of the posttest. Differences or the lack of differences by gender in the treatment and non-treatment groups would indicate that the experimental treatment affected issue salience, supporting RQ1. Participants in this experiment were mostly female, with males making up approximately 25 percent of participants in each group. The High Exposure (26.3 percent male) and No Exposure groups (27.8 percent male) had the highest proportion of male participants, followed by the Medium Exposure group (23.5 percent male) and No-Facebook Control group (17.6 percent male). Graphs of the responses to each posttest measure and the rating score were calculated for each group according to gender. Chi-Square tests of association were then performed to determine whether gender was significantly associated with kind of response for each measure.

RH5: Question 2

As mentioned previously, the first measure asked participants to rate the importance of the issue from "not so important" to "extremely important". Participants generally felt that the issue was important, with participants in all four groups rating the issue as "important" or greater. A graph of the responses to Question 2 for the High Exposure group reveals how both males (60 percent) and females (78.6 percent) considered the issue "extremely important". As the proportion of responses for both males and females is very similar, RH5 does not appear to be supported. Figure 45 displays this graph.

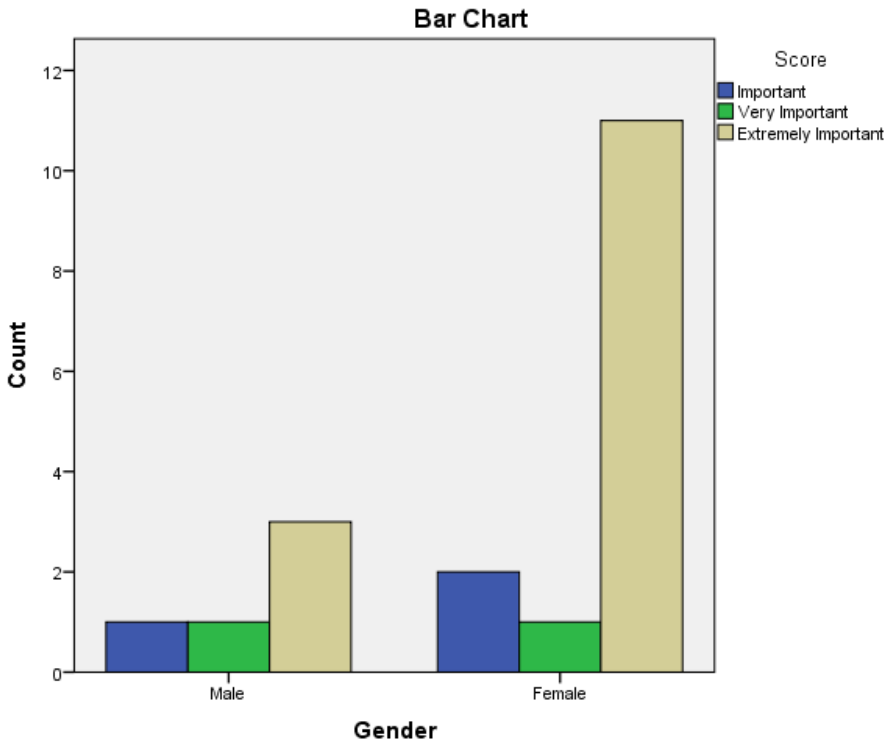


Figure 45: High Exposure Group Question 2 Scores By Gender

In order to fully support RH5, there would have to be a statistically significant association between one gender and the responses. A Chi-Square test of association was performed on the data to determine whether such an association exists. The results can be seen in Table 38 on page 214 of Appendix B.

RH5 is not supported by Question 2 for the High Exposure group as Chi-Square(2) = 0.827 and P = 0.661, indicating that gender and participants' judgment of issue importance are not significantly associated at $P < 0.05$. For this measure, there is not a noticeably different salience in either males or females, partially answering RQ2. The demographic factor of gender does not seem to influence issue salience. Participants in the Medium Exposure group considered the issue "very important" or "extremely important". All of the male participants considered the issue "extremely important" while 84.6 percent of the females thought the same. This seems to not support RH5 in that both genders attribute a high level of importance to the issue, as opposed to differing in their responses. Figure 46 displays the graph of responses by gender to this measure for the Medium Exposure group.

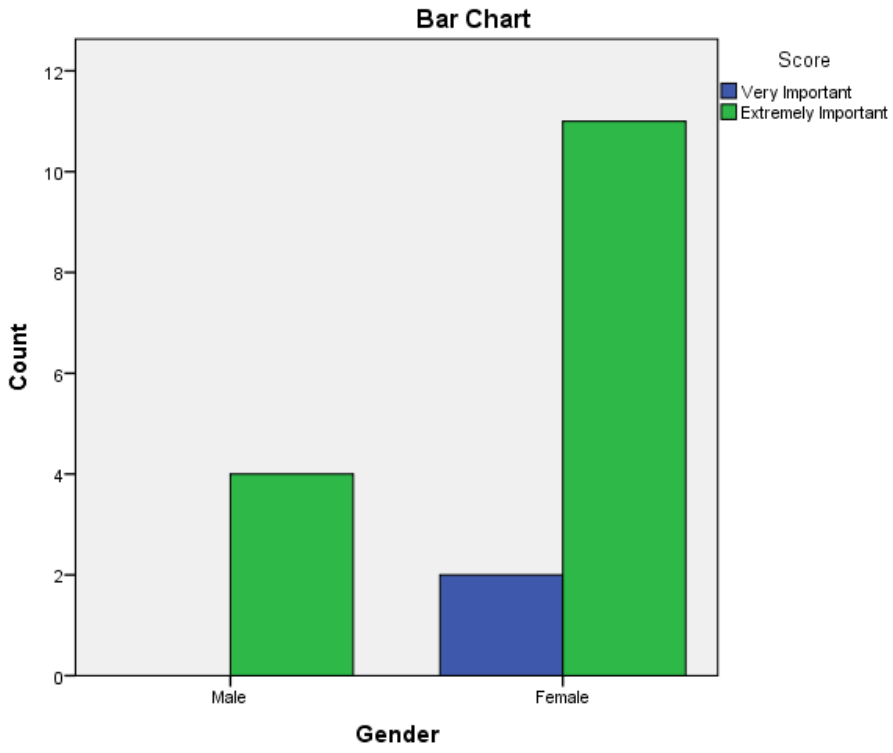


Figure 46: Medium Exposure Group Responses to Question 2 By Gender

A majority of both male and female participants consider the issue "extremely important", and only 15.4 percent of female participants considered the issue "very important". In addition to not supporting RH5, the results show that the demographic

factor of gender did not play a role in participants' issue salience. A 2 by 2 Chi-Square test of association was conducted to determine if the two responses to Question 2 were significantly associated with gender, as seen in Table 40 on page 215 in Appendix B.

With Chi-Square(1) = 0.697 and P = 0.404, the association between gender and issue importance was found to not be statistically significant. RQ2 is partially answered by the results to this test and that of the High Exposure group, as gender did not play a role in the responses that participants chose. Rather, both males and females had similar levels of issue salience for this measure. Unlike in the High and Medium Exposure groups, participants in the No Exposure and No-Facebook control group showed greater variation by gender in responses to Question 2. Figure 47 shows the graph of the results for the No Exposure group.

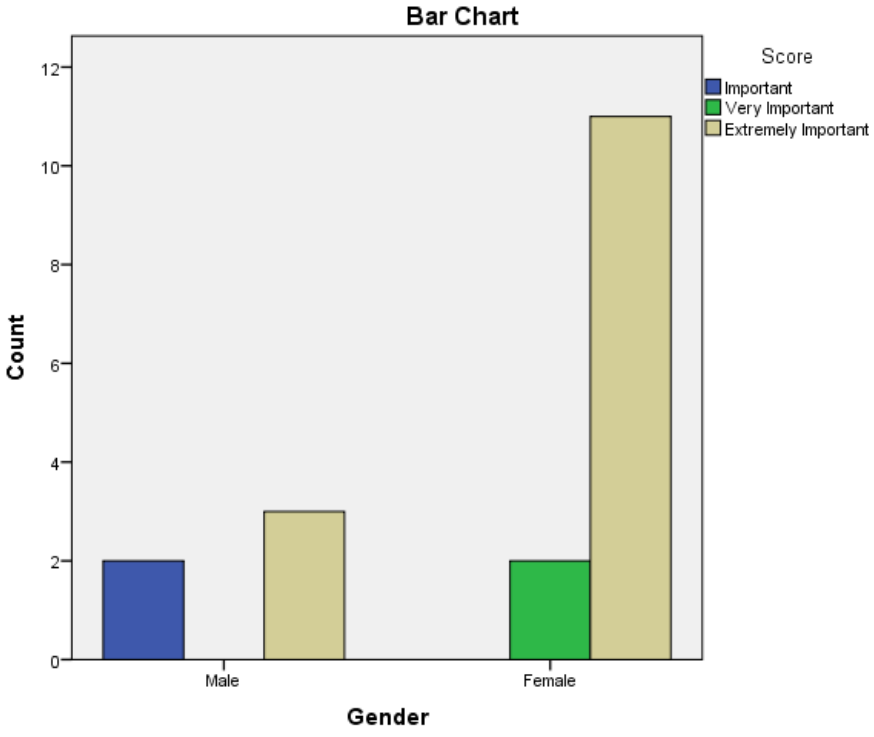


Figure 47: No Exposure Group Responses to Question 2 By Gender

Male participants in this group either considered the issue "important" (40 percent) or "extremely important" (60 percent), while female participants considered the issue

"very important" (15.4 percent) or "extremely important" (84.6 percent). Unlike the two groups with exposure to media concerning the issue, this group has greater variation in one gender as opposed to the other. A Chi-Square test of association was conducted to determine if the responses for this group were significantly associated with gender. Table 51 displays the results of this test.

Table 51

Chi-Square Analysis of No Exposure Group Question 2 According to Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.251[a]	2	.044
Likelihood Ratio	6.722	2	.035
Linear-by-Linear Association	3.204	1	.073
N of Valid Cases	18		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .56.

Table 51

There is a statistically significant association between gender and responses to Question 2 for the No Exposure group, with Chi-Square(2) = 6.251 and P = 0.044, supporting RH5. As this group was not exposed to treatment media, RH1 may be partially supported by this data as the two treatment groups did not have significant associations by gender while this non-treatment group did. An association between gender and this issue's importance may occur naturally, partially answering RQ2, which the No-Facebook Control group should also display. A graph of the responses to Question 2 for the No-Facebook Control group is shown in Figure 48.

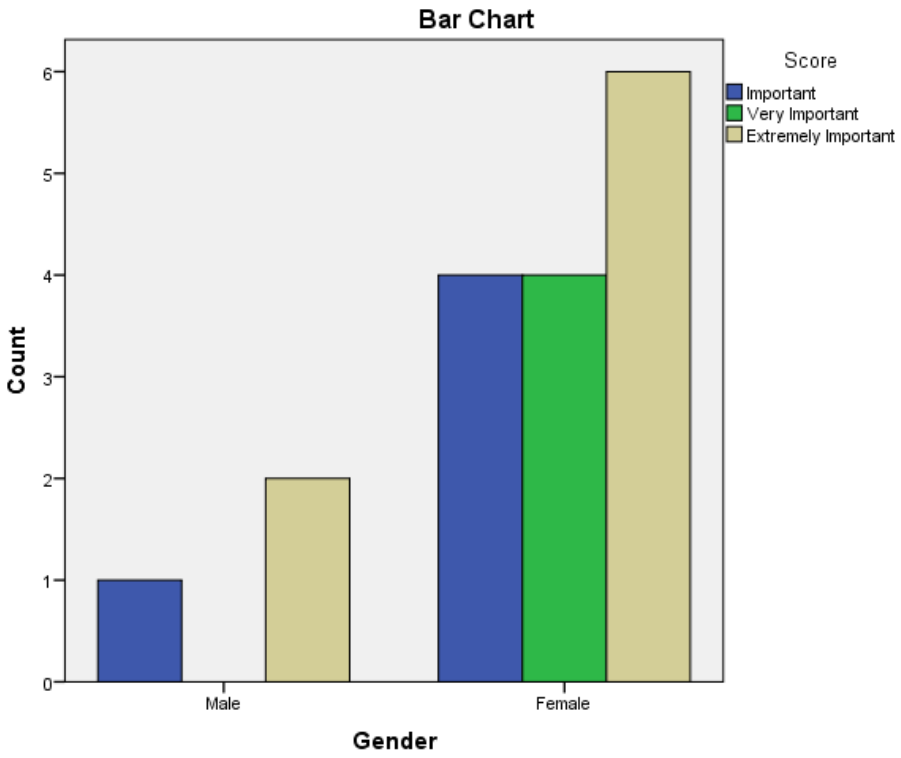


Figure 48: No-Facebook Control Group Responses to Question 2 By Gender

This group shows much more variation than in any of the other groups, with male and female participants considering the issue "important" (33.3 percent of males, 28.6 percent of females). However, as this variation occurs in responses for both male and females, the association found in the No Exposure group may not exist. A Chi-Square test of association was performed on the data to determine whether the association between response and gender was statistically significant. Table 43 on page 217 in Appendix B shows the result of this test.

As Chi-Square(2) = 1.174 and P = 0.556, there is no significant association between gender and the responses to Question 2 for this group. This indicates that gender did not play a role in the issue salience of participants without any exposure to the treatment materials. RH5 is not supported by the results of any group for this question with the exception of the No Exposure group. The significant association between gender and response for this group demonstrates that the treatment of several current events media may have had an effect, supporting RH1. Also, a greater

proportion of participants in the two treatment groups did attach higher importance to the issue, meaning that the treatment did have some effect (as calculated by the ANOVA tests discussed previously). However, as most of the groups did not show variation by gender for this measure, RH5 was not supported. The variation in these groups can be clearly seen in the response tabulations (Tables 37 - 43) found in Appendix B on pages 214 - 217.

RH5: Question 4

The second measure on the posttest evaluated how much participants thought that candidates in the parliamentary election should worry about the issue of ignorance/illiteracy. The responses ranged from "worry not at all" to "worry a little", "worry some", and "worry a lot". Unlike in Question 2, both the High and Medium Exposure groups saw greater variation by gender in the responses than did the No Exposure and No-Facebook Control groups. No participants in any of the groups thought that candidates should "worry not at all" about the issue. The responses to this question for each group were tabulated by gender and Chi-Square tests of associations were performed to determine if there was an association between response choice and gender. Figure 49 displays a graph of the responses for the High Exposure group.

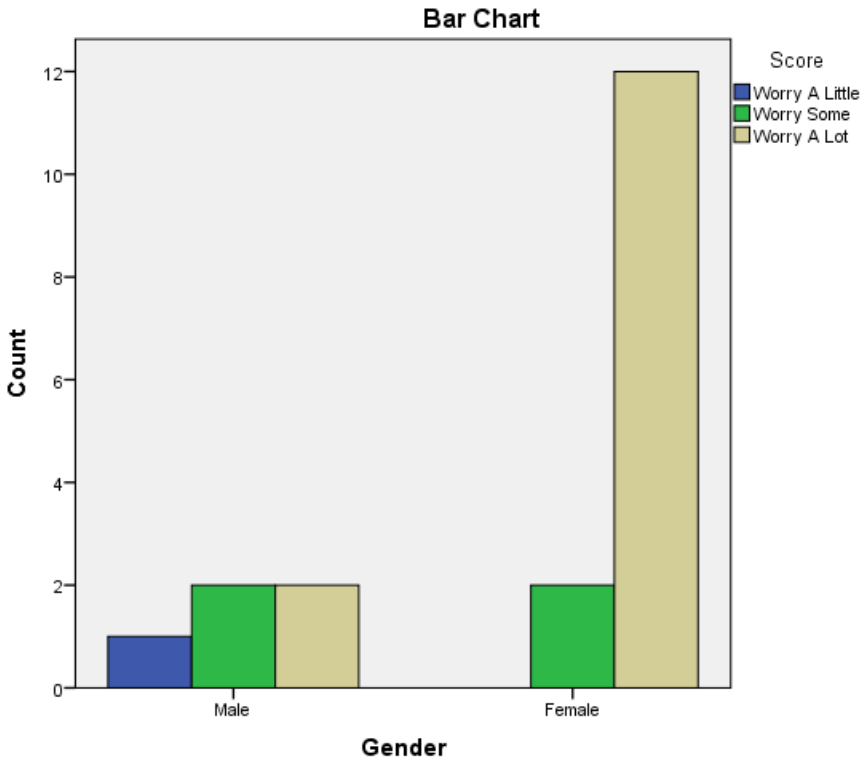


Figure 49: High Exposure Group Responses to Question 4 By Gender

The responses by gender in this group appear to support RH5 in that only 40 percent of males thought that candidates should "worry a lot", while 85.7 percent of females thought the same. In other words, females seemed to be more affected in this measure than males, supporting RH5 in that the issue salience was relatively different across gender lines. A Chi-Square test of association was performed to determine if this association was statistically significant. The results are shown in Table 52.

Table 52

Chi-Square Analysis of High Exposure Group Question 4 According to Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.002[a]	2	.082
N of Valid Cases	19		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .26.

Table 52

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Although not significant at the P < 0.05 level, as Chi-Square(2) = 5.002 and P = 0.082 there is a relatively strong association in this group between gender and response type. This result supports RH5 in that males seemed to have less issue salience than females for this measure. In order to further support this hypothesis, the Medium Exposure group should show a similar relationship. Figure 88 shows the bar chart of responses for this group divided by gender.

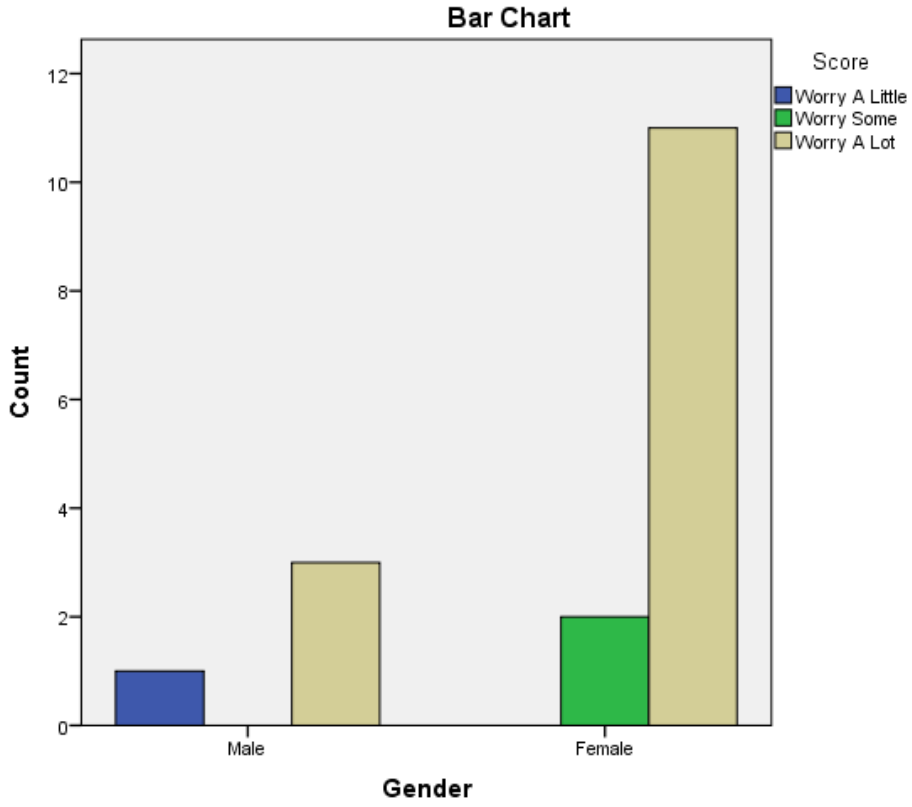

Figure 50: Medium Exposure Group Responses to Question 4 By Gender

Similar to the High Exposure group, male participants exhibited greater variation in the responses than female participants to a small degree. 84.6 percent of female participants thought that candidates should "worry a lot" about the issue compared with 75 percent of male participants. While not as large of a discrepancy as in the High Exposure group, the distribution suggests some association between females and

higher issue salience. A Chi-Square test of association was conducted to determine whether this association was statistically significant, as displayed in Table 53.

Table 53

Chi-Square Analysis of Medium Exposure Group Question 4 According to Gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.900[a]	2	.142
N of Valid Cases	17		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .24.

Table 53

With Chi-Square(2) = 3.900 and P = 0.142, the association is not statistically significant. However, the P value is relatively low, indicating that there is an association between the variables in this group. This result further supports RH5 as both treatment groups showed differences in responses by gender. Also, the variation was similar to that of the High Exposure group, with higher percentages of females thinking that candidates should "worry a lot" about the issue. However, in order for RH5 to be further supported, the P values of the No Exposure and No-Facebook control groups should also show an association. Figure 51 shows the graph of responses by gender for the No Exposure group.

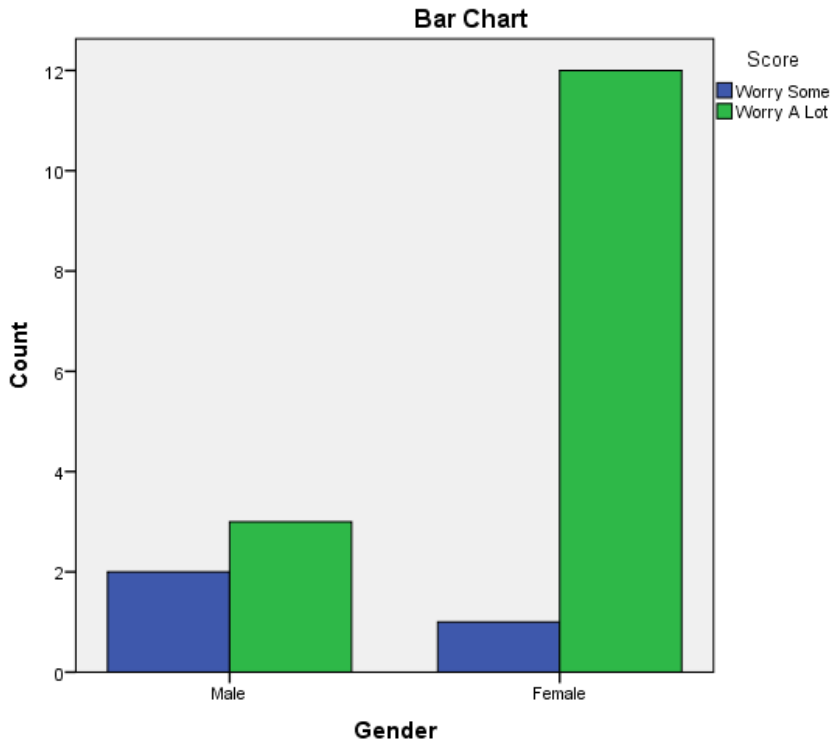

Figure 51: No Exposure Group Responses to Question 4 By Gender

Unlike participants in the High and Medium Exposure groups, those in the No Exposure group thought that candidates should only worry "some" or "a lot" about the issue. A high percentage of females (92.3 percent) as opposed to males (60 percent) chose the highest degree of salience, with candidates worrying "a lot" about the issue. A Chi-Square test of association was performed to determine if there was a statistically significant association between gender and these responses, as seen in Table 54.

Table 54

Chi-Square Analysis of No Exposure Group Question 4 According to Gender

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.714[a]	1	.099		
Fisher's Exact Test				.172	.172
N of Valid Cases	18				

a. 3 cells (75.0%) have expected count less than 5. The minimum expected count is .83.

b. Computed only for a 2x2 table

Table 54

This result also partially supports RH5 as Chi-Square(1) = 2.714 and P = 0.099, indicating that there was a strong but not significant association between gender and the responses to Question 4 for the No Exposure group. While this group was not exposed to media concerning the issue, the strong levels of association in all groups suggest that issue salience may be affected by gender. In the No-Facebook Control group, both male and female participants thought that candidates should "worry a lot" about the issue (100 percent and 78.6 percent, respectively). The bar chart of responses by gender for this group is displayed in Figure 52.

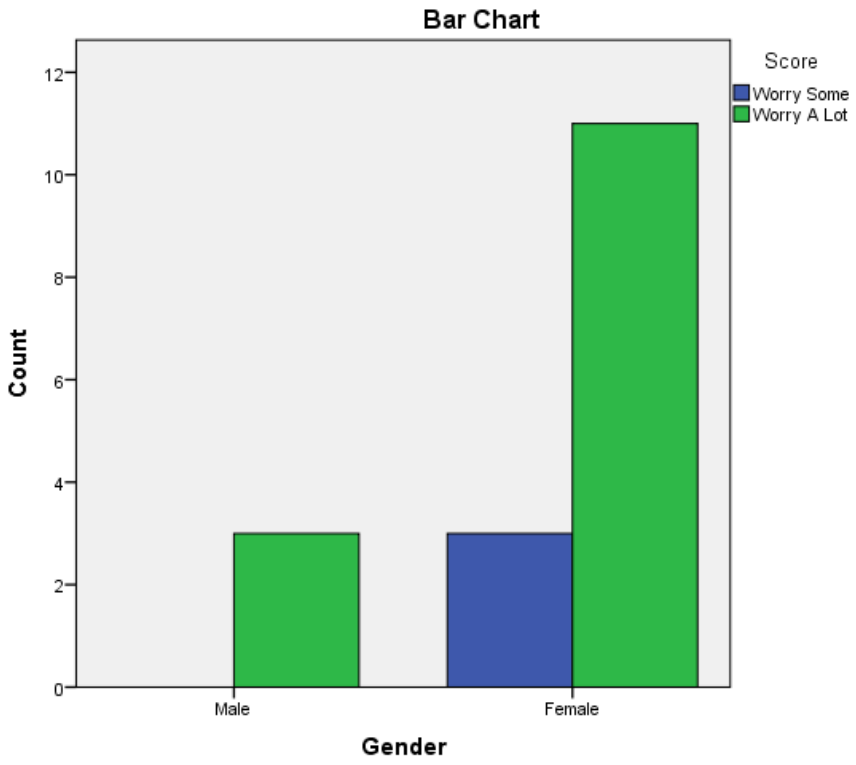

Figure 52: No-Facebook Control Group Responses to Question 4 By Gender

Participants in this group showed the least variation in responses among all the groups, with the majority of both male and female participants choosing the response signifying the highest level of salience. As the distribution of responses appears the same for both male and female participants, RH5 is not supported in that the group does not exhibit differences in salience according to gender. A Chi-Square test of association was performed to determine if there was a statistically significant association between gender and response to Question 4 for this group, as shown in Table 48 on page 219 in Appendix B.

The result of this test does not support RH5 because Chi-Square(1) = 0.781 and P = 0.377, a higher P value than any of the treatment groups. This high P value suggests that there is not a natural association between gender and response to this question, further demonstrating that the treatment may have had an effect on participants exposed to media on Facebook, supporting RH1. The tabulations of

responses to Question 4 by gender and Chi-Square tests for each group (Tables 44 - 48) best demonstrate the variation between male and female participants in these treatment groups, as seen in Appendix B on pages 217 -219. The result of the analyses for this measure support RH5 overall in that gender played a role in how participants answered Question 4. As the data supports RH5, RQ2 is partially answered in that higher issue salience appears to occur more strongly in female participants for this measure. For this question, the demographic factor of gender seems to influence the issue salience of participants.

RH5: Question 5

The third measure on the posttest, Question 5, asked participants how often they talked about the issue. In order to support RH5, male and female participants should have different distributions of responses in each of the treatment groups. In order to test RH5, the responses to Question 5 were tabulated for each group according to gender. Chi-Square tests of association were performed to determine if there were statistically significant associations between gender and kind of response. The High Exposure and No-Facebook Control groups had the most variation in responses, with some participants who talked "rarely" in addition to some who talked "almost every day" about the issue. Figure 53 shows the chart of responses by gender for the High Exposure group.

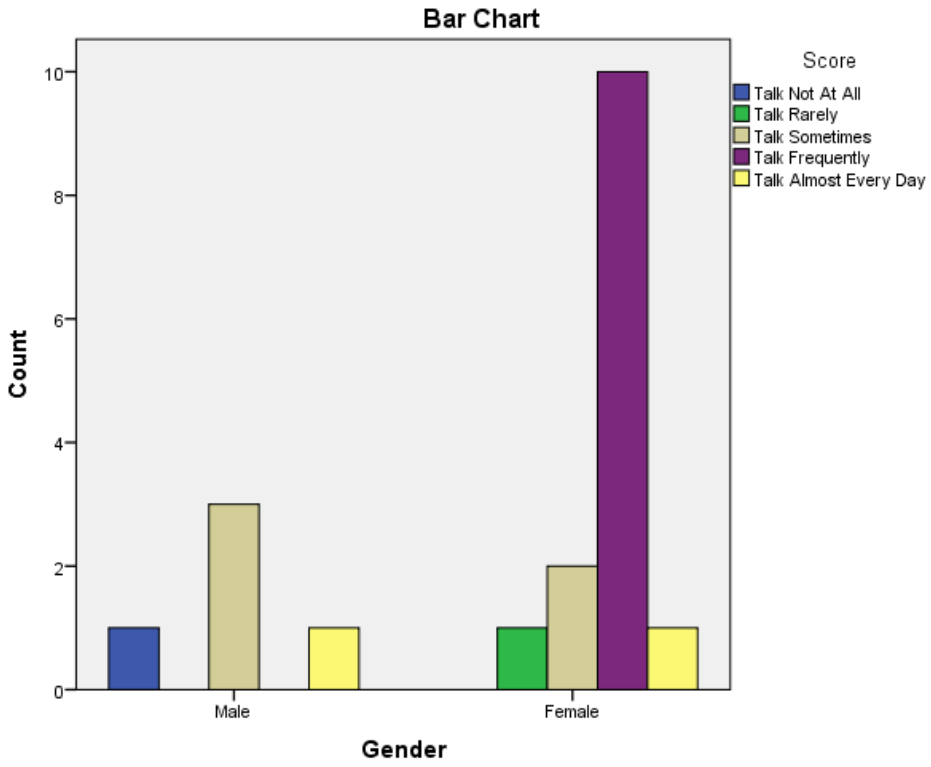

Figure 53: High Exposure Group Responses to Question 5 By Gender

Male and female participants in this group differed greatly in their amount of talking about the issue, with 80 percent of male participants talking "sometimes" or less about the issue and 78.5 percent of women talking "frequently" or "almost every day" about the issue. As in Question 4, the issue of ignorance/illiteracy appears to have greater salience for female participants, supporting RH5. A Chi-Square test of association was performed to determine if the association between gender and response was statistically significant. Table 55 shows the results of this test.

Table 55

Chi-Square Analysis of High Exposure Group Question 5 According to Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.233[a]	4	.037
N of Valid Cases	19		

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .26.

Table 55

With Chi-Square(4) = 10.233 and P = 0.037, there is a statistically significant association between gender and response to Question 5 for the High Exposure group. This result supports RH5 as the issue salience among female participants was of a greater degree than among male participants. However, in order to fully support this hypothesis, the other groups should also have low P levels. Figure 54 displays the graph of responses for the Medium Exposure group.

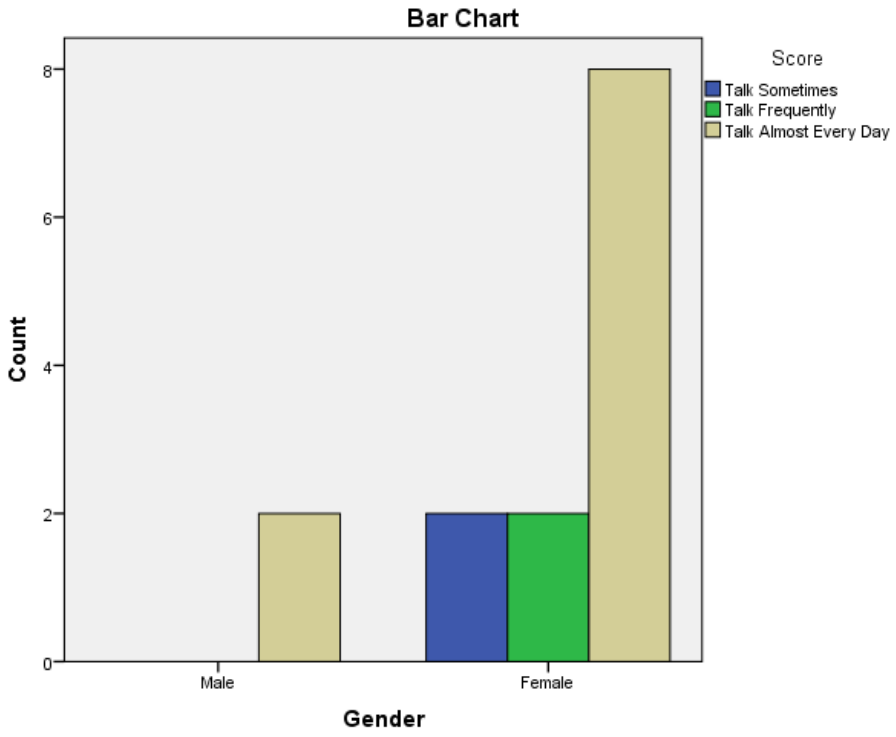

Figure 54: Medium Exposure Group Responses to Question 5 By Gender

At first glance, the tabulation does not support the hypothesis as female participants had some members who talked about the issue less than male participants. As 100 percent of male participants compared with 66.7 percent of female participants talked about the issue "almost every day", there may be an association between gender opposite to the trend seen so far. A Chi-Square test of association was conducted in order to verify whether the association between gender and responses for the Medium Exposure group was statistically significant. The results of this test are displayed in Table 51 on page 221 in Appendix B.

The association between gender and response for this group was found to be not significant with Chi-Square(2) = 0.933 and P = 0.627. This result does not support RH5 in that there was not a significant association between gender and particular responses. The high P value indicates that there is a weak association between the two, indicating that this gender did not play a role in issue salience. The No Exposure group had a similar distribution of responses by gender to the Medium Exposure group, yet more female participants (25 percent) only talked "sometimes" about the issue. The bar chart of responses for this group is seen in Figure 55.

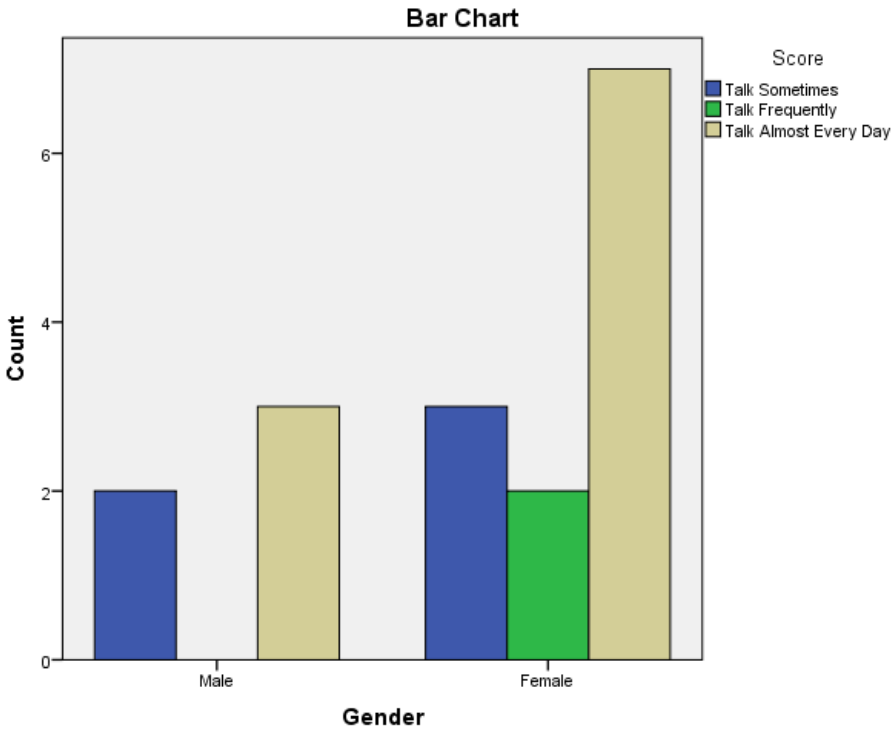

Figure 55: No Exposure Group Responses to Question 5 By Gender

The distribution of responses for both male and female participants is relatively similar in this treatment group, as 60 percent of males and 58.3 percent of females talked about the issue "almost every day". This result does not support RH5 in that no variation occurs between male and female responses. A Chi-Square test of association was performed on the data to establish if these responses were

significantly associated with gender, as displayed in Table 53 on page 221 in Appendix B.

The result of this test also do not support RH5 as Chi-Square(2) = 1.105 and P = 0.576, meaning that there is not a significant association between gender and response for this group. As both the Medium and No Exposure groups had high P values, there are relatively weak associations between gender and response for this measure. In order to validate RH5, the No-Facebook Control group should also have an association by gender for the responses to Question 5. A graph of the responses was constructed for the No-Facebook Control group, as shown in Figure 56.

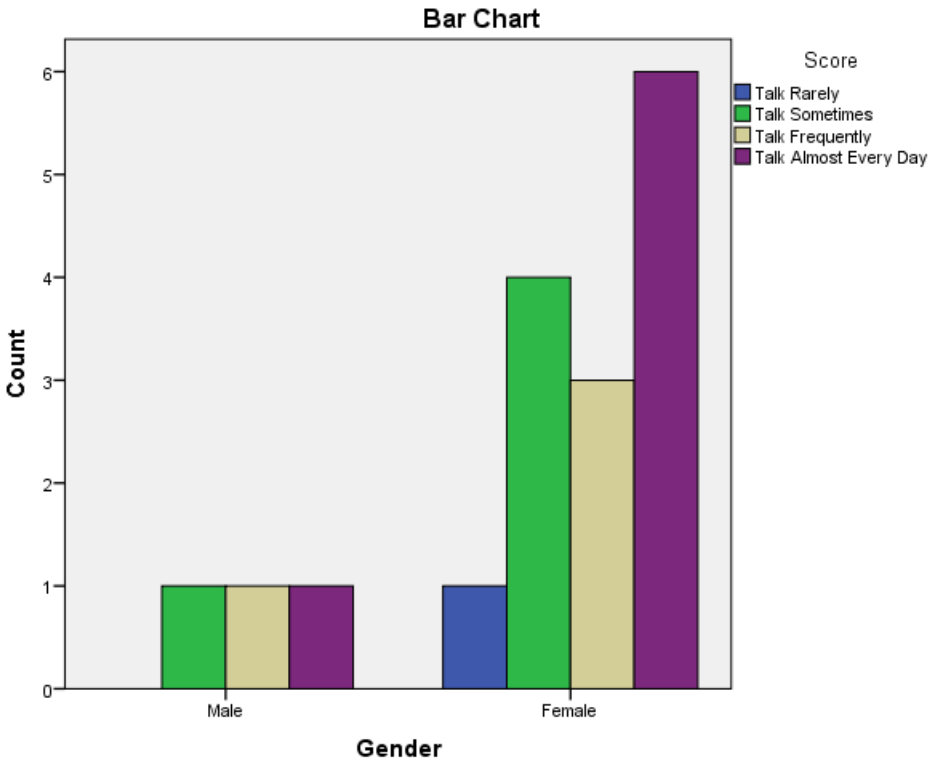

Figure 56: No-Facebook Control Group Responses to Question 5 By Gender

The distribution of responses for both male and female participants in the control group is similar, with roughly a third of each gender talking "sometimes" or "almost every day" about the issue. Unlike in the High Exposure group, the responses for each gender are distributed evenly along the spectrum of salience from most salient to

least salience, not supporting RH5. A Chi-Square test of association was performed on the data to determine if a statistically significant association existed between gender and type of response, as shown in Table 55 on page 222 in Appendix B.

With Chi-Square(3) = 0.437 and P = 0.933, there is no statistically significant association between gender and type of response for this group. With the largest P value of all the groups, the results of the test indicate that in the No-Facebook Control group, male and female participants talked about the issue with relatively the same frequency without exposure to treatment. As a result, RH5 is not supported, and RQ2 is also partially answered, as the demographic factor of gender did not play a role in the distribution of responses for three out of the four groups. The differences by gender in these groups are best visible in graphical representation, as seen in Appendix B. Notably, as in the second posttest measure, females in the treatment groups talked about the issue more frequently than males, demonstrating a possible greater issue salience than males, partially supporting RH5.

RH5: Index Score

In order to further test RH5, the index scores were tabulated by group according to the gender of participants. As when testing RH4, the index scores were reduced to their values of between 1 and 14 to satisfy the Chi-Square test requirements, with 1 signifying the issue had the "least salience" and 14 signifying the issue had the "most salience" for a participant. To support RH5, there should be a significant association between gender and index score in the groups. Figure 57 shows the bar chart of scores for the High Exposure group.

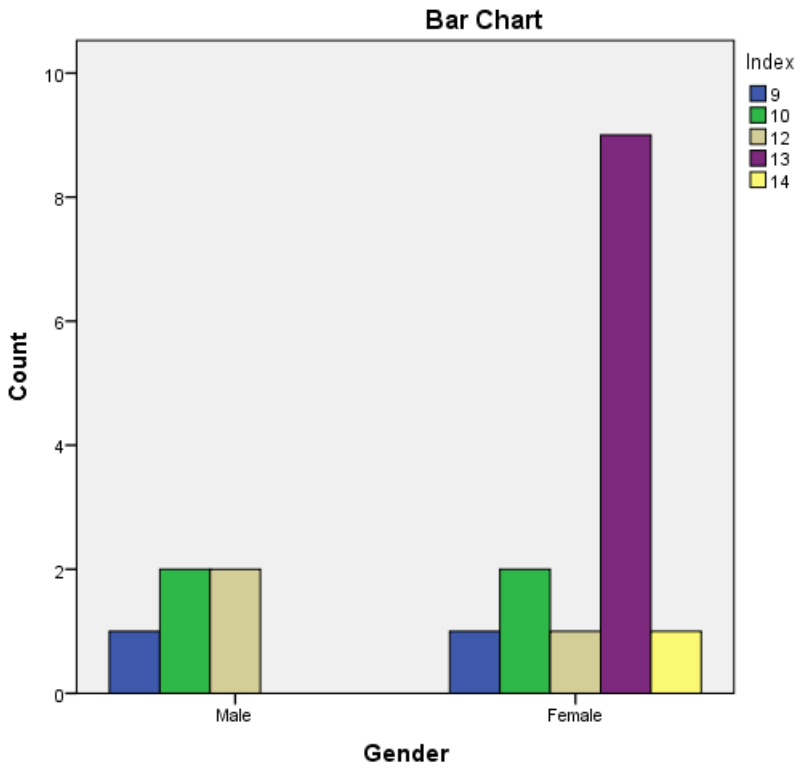

Figure 57: High Exposure Group Index Scores By Gender

This tabulation appears to support RH5 as 60 percent of male participants received index scores of 10 or lower, compared with 21.4 percent of female participants. No male participants received the two highest scores of 13 or 14, yet 71.4 percent of female respondents had scores of that magnitude. A Chi-Square test of association was performed to establish if this association was statistically significant, as seen in Table 56.

Table 56

Chi-Square Analysis of High Exposure Group Index Scores According to Gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.826[a]	4	.098
N of Valid Cases	19		

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .26.

Table 56

Although not significant at P < 0.05, as Chi-Square(4) = 7.826 and P = 0.098, there is a strong association between gender and index score for this treatment group. This partially supports RH5 as male participants seem to have an association with lower scores (lower salience) while female participants seem to have an association with higher scores (higher salience). In order to further support this hypothesis, the Medium Exposure group should show a similar distribution of scores by gender. Figure 58 shows the bar chart of scores by gender for this group.

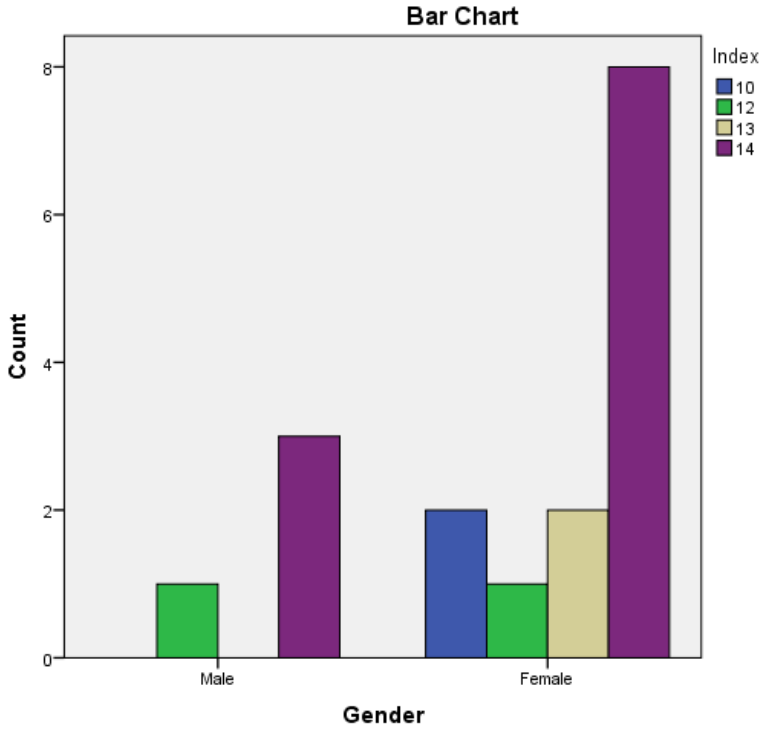

Figure 58: Medium Exposure Group Index Scores By Gender

Participants in the Medium Exposure group showed a higher level of issue salience in both genders than in the High Exposure group. 75 percent of male participants and 61.5 percent of female participants received the highest index score of 14. This does not support RH5 as the distribution of scores for male participants is similar to that of female participants. A Chi-Square test of association was conducted to see if this

association was statistically significant, as shown in Table 58 on page 224 in Appendix B.

With Chi-Square(3) = 2.095 and P = 0.553, the results of this test do not support RH5, as there is no significant association between gender and index score for this group. As there is no association and both genders show similar variation in index scores, gender does not play a role in the issue salience for this treatment group. RH5 predicts that the No Exposure and No-Facebook Control groups will show an association. Figure 59 displays the bar chart of scores for the No Exposure group.

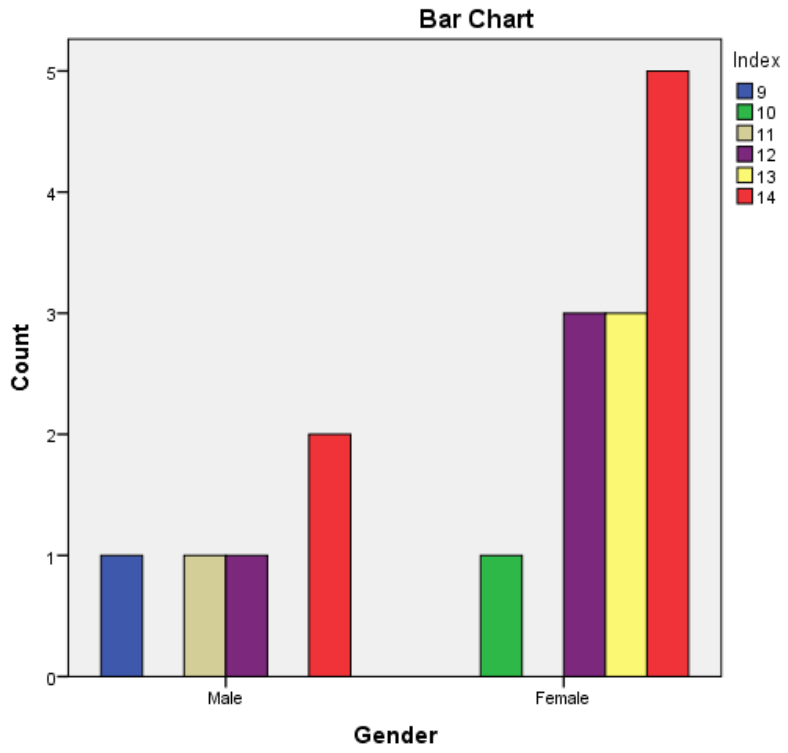

Figure 59: No Exposure Group Index Scores By Gender

The variation of scores by gender for this group are similar, with approximately 40 percent of both genders receiving high scores of 14 and 60 percent receiving a range of scores. To determine whether these scores were significantly associated with gender, a Chi-Square test of association as performed, as shown in Table 60 on page 224 in Appendix B.

As in the Medium Exposure group, with Chi-Square(5) = 6.507 and P = 0.260, there is no significant association between the variables. This does not support RH5 as gender does not seem to play a role in affecting the issue salience of participants not exposed to treatment. The No-Facebook Control group should show differences between male and female participants according to RH5. A bar chart of index scores for this group is shown in Figure 60.

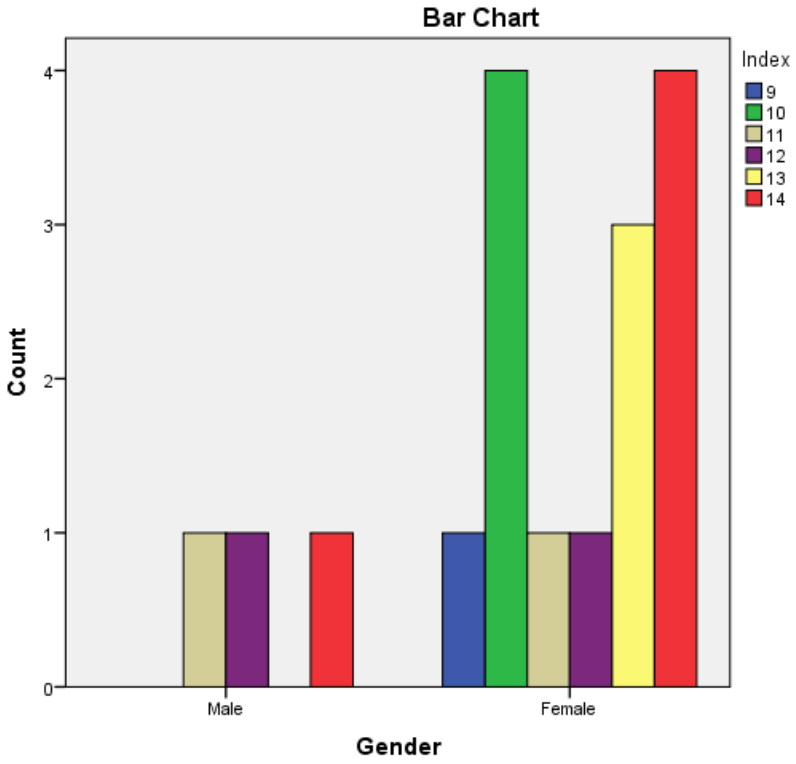

Figure 60: No-Facebook Control Group Index Scores By Gender

The distribution of scores for this group is similar to that of the others, with participants receiving scores between 9 and 14. However, this group had the smallest proportion of participants receiving the highest scores of 13 or 14 (47 percent) compared to the other groups. The results do not support RH5 as both male and female participants have a similar distribution of index scores. To further support RH5, there should be an association between gender and index score, as determined by a Chi-Square test of association, as seen in Table 62 on page 225 of Appendix B.

This result does not support RH5 as with Chi-Square(5) = 4.614 and P = 0.465, there is no statistically significant association between gender and index score for this group. Overall, the comparison of index scores and gender partially supports RH1 as the group with the lowest P value was the High Exposure group, indicating a possible effect of the treatment. As in the third measure (Question 6), females in the High Exposure group were more likely than males to receive a higher index score, indicating a greater degree of issue salience and supporting RH5. Tabulations displaying these differences by gender (Tables 56 - 62) can be found in Appendix B on pages 223 - 225. RQ2 is also partially answered by this data, as gender appears to have some association with issue salience.

RH5: Rating

In order to further test RH5, the posttest rating scores for each group were tabulated according to gender. The hypothesis predicts that there will be differences by gender in the scores of participants in the treatment groups. Three of the groups had relatively few participants who rated the issue of ignorance/illiteracy 1 or "most important" in comparison with the six other national issues. The Medium Exposure group had no participants rate the issue as either 1 or 7, for "least important". As participants were only asked to rank the issue on the posttest, the data only reveals an overall measure of issue importance. However, as the experiment occurred during the Egyptian parliamentary elections, all of the issues available as choices were relatively important for participants, as will be discussed in the conclusion. A tabulation of the rating scores by gender for the High Exposure group is displayed in Figure 61.

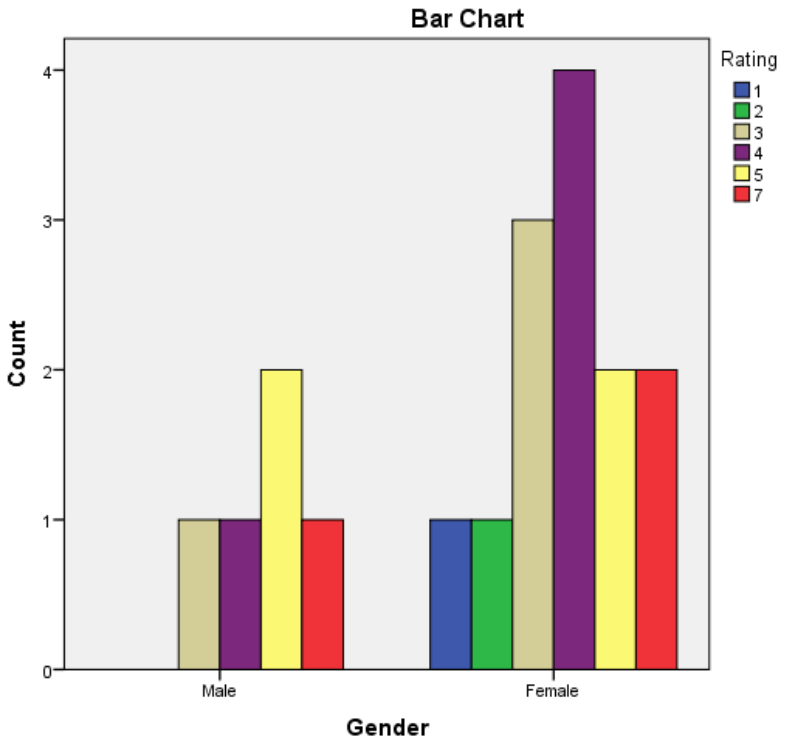

Figure 61: High Exposure Group Rating Scores By Gender

The distribution of scores by gender for this group shows that male participants were less likely to rank the issue as high as female participants, with 80 percent of males giving the issue a score of 4, 5 or 7. 38.5 percent of female participants rated the issue as 3 or higher while only 20 percent of male participants ranked the issue as 3. This result partially supports RH5 in that male participants seemed to have a lesser degree of salience, with fewer participants ranking the issue as important in comparison to female participants. A Chi-Square test of association was performed to determine if this association was statistically significant, as shown in Table 64 on page 226 in Appendix B.

This result does not support RH5 as Chi-Square(5) = 1.966 and P = 0.854, indicating that there is no significant association between gender and rating score for this group. The high P value means that there is a very weak association between the variables, and that the differences between the distributions of the scores by gender are dissimilar to those found in Questions 4 and 5. The responses of the Medium

Exposure group have a smaller range of scores than the other groups. While only two male participants completed the question and rated the issue either 2 or 4, the twelve female participants rated the issue from 2 to 6. The graph of these ratings may be seen in Figure 62.

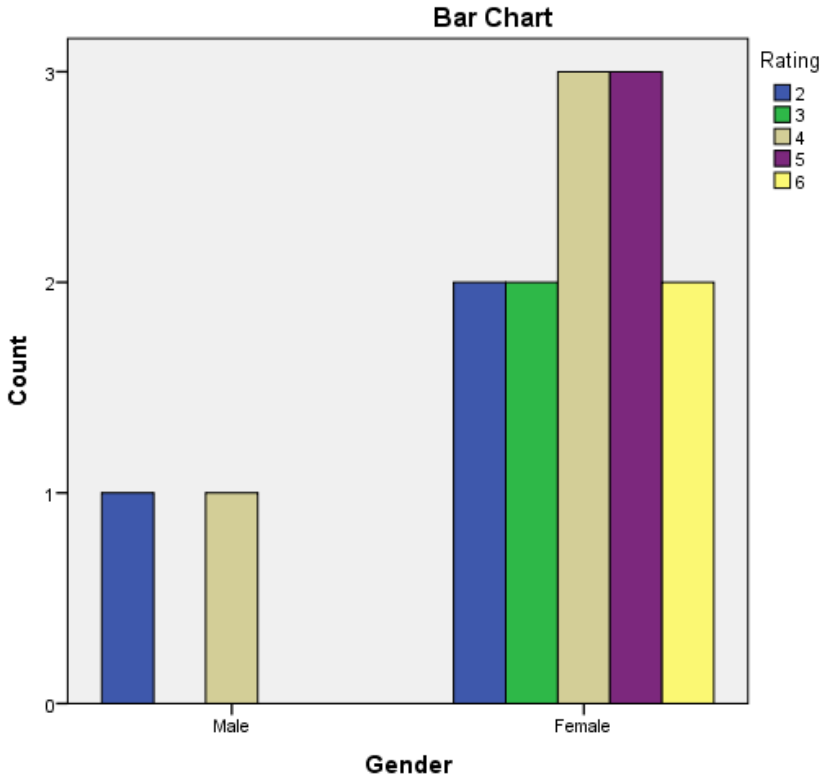

Figure 62: Medium Exposure Group Rating Scores By Gender

The data in this tabulation partially supports RH5 as male participants rated the issue as more important than 41.7 percent of female participants. Although the gender ratio for this group was larger for rating score than in the other measures, a Chi-Square test of association was performed to determine if gender had a statistically significant association with rating score for this group. The results of this test can be found in Table 66 on page 227 of Appendix B.

With Chi-Square(4) = 2.431 and P = 0.657, the result of the test does not support RH5 as there is no significant association between gender and rating score for the Medium Exposure group. As both treatment groups had large, non-significant P

values, RH5 is not supported by this measure, as significant differences by gender do not occur. Participants in the No Exposure group also share a large variation in scores within each gender. The tabulation of the scores by gender for this group is displayed in Figure 63.

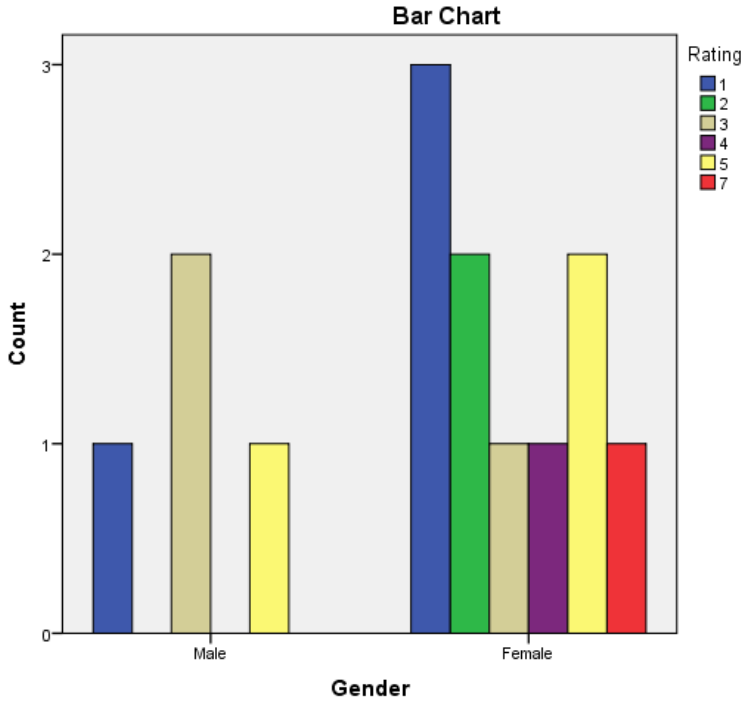

Figure 63: No Exposure Group Rating Scores By Gender

Similar proportions of participants are found at both the 1 rating (25 percent of males and 30 percent of females) and 5 rating (25 percent of males and 20 percent of females). As the distribution of scores by gender is similar in this group, RH5 is not supported. A Chi-Square test of association was performed to establish whether there was a statistically significant association between gender and rating score for this question, as can be seen in Table 68 on page 228 in Appendix B.

As in the two treatment groups, with Chi-Square(5) = 3.792 and P = 0.580, there is no significant association between gender and rating score for the No Exposure group. This also does not support RH5, as the lack of association in the treatment and non-treatment groups between gender and rating score indicate gender

did not affect issue salience. The No-Facebook Control group also has an unequal gender ratio but has all of the male participants rating the issue as 5 in relative importance. The bar chart of rating scores by gender for this group is shown in Figure 64.

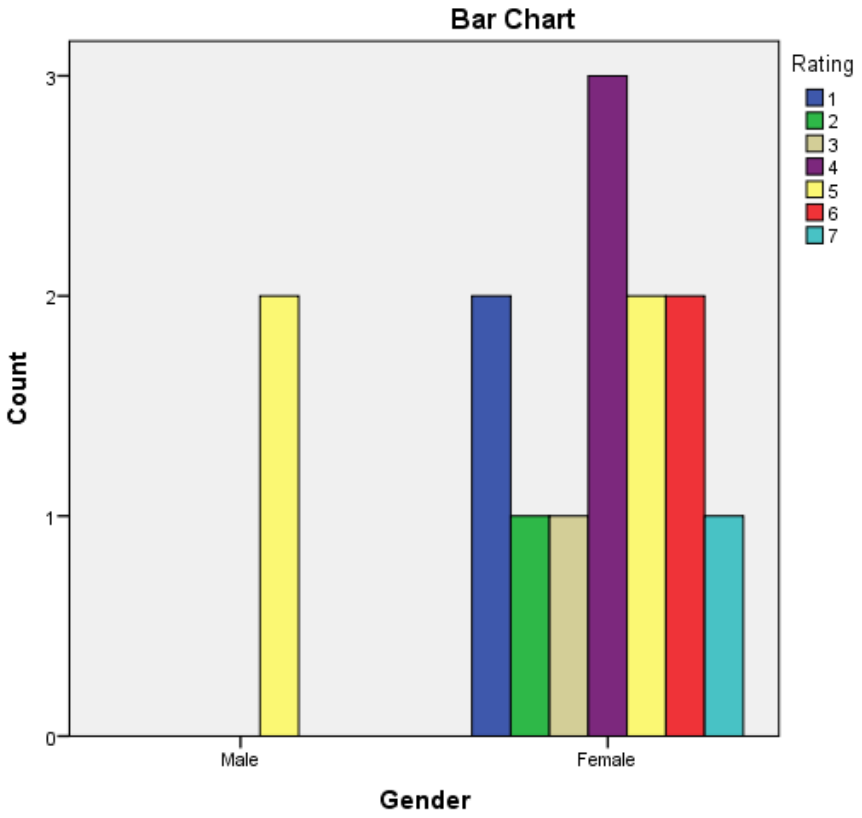

Figure 64: No-Facebook Control Group Rating Scores By Gender

The female participants in this group display a much greater variation in rating scores than do the male participants. Despite the lack of male participants in this group, a Chi-Square test of association was conducted to determine if gender was associated with rating score without experimental treatment. RH5 will be partially supported if this test also shows a statistically significant association. Table 70 on page 229 in Appendix B displays the results of this test.

As predicted, Chi-Square(6) = 5.833 and P = 0.442, indicating there is not a natural and significant association between gender and rating score. This does not

supports RH5 as rating scores should be associated with gender. Also, the overall result of the tests on the rating score measure do not support RH1, for the treatment groups did not have gender associate significantly with the score selected by participants to rate the issue importance. In each group, participants of both genders rated the issue in similar proportions with the exception of the Medium and No-Facebook Control groups, not supporting RH5. These groups did not have enough male participants (N = 2 in each) to accurately compare the score distribution by gender. Tabulations of the responses in Appendix B (Tables 63 - 70) on pages 226 - 229 display how the groups with a greater proportion of male participants had similar distributions of rating scores. These also show how the female participants in each group have a similar distribution of rating score, with the exception of the No Exposure group.

RH6: Religious Affiliation

The third hypothesis posed to answer RQ2 concerned the religious affiliation of participants as reported in the pretest survey. Participants were asked to choose their religious affiliation as "Muslim", "Christian", or "Other" with a fill in the blank. All of the participants who answered the question in the experiment self-identified as either Muslim (N = 57) or Christian (N = 9). As the proportion of Muslim-Christian participants is extremely unequal in the sample, the data may not accurately represent Christian viewpoints and cannot be generalized. RH6 was tested through a series of Chi-Square tests on the association between religious affiliation and responses to the experimental measures.

RH6: Question 2

As mentioned above, the first measure asked participants to evaluate the importance of issues on a five point scale, from "not important at all" to "extremely important". The bar chart of responses for the High Exposure group is displayed in Figure 65.

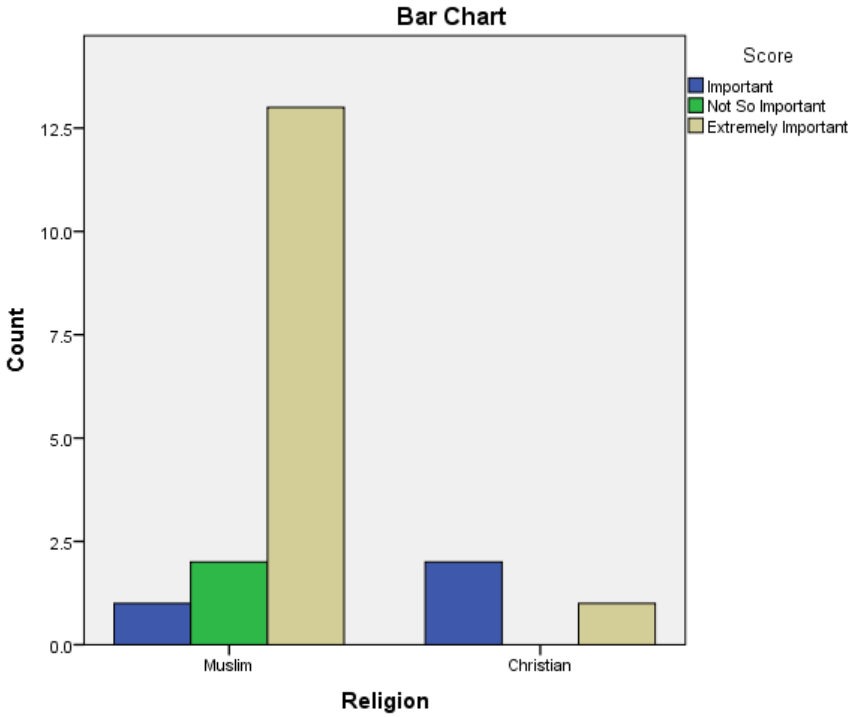

Figure 65: High Exposure Group Responses to Question 2 By Religious Affiliation

This tabulation seems to support RH6 as more Muslim participants in the High Exposure group considered the issue of ignorance/illiteracy as "extremely important" (81.2 percent) than Christian participants (33.3 percent). To determine whether this association was statistically significant, a Chi-Square test of association was performed, as seen in Table 57.

Table 57

Chi-Square Analysis of High Exposure Group Question 2 According to Religious Affiliation

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.002[a]	2	.030
N of Valid Cases	19		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .32.

Table 57

This test further supports RH6 because at Chi-Square(2) = 7.002, P = 0.030, indicating that there is a statistically significant association between religious affiliation and the response to Question 2 for this group. For this measure, issue salience appears to be greater for Muslims than for Christians, a difference predicted by RH6. However, participants in the Medium Exposure group do not show a similar division by religious affiliation. The bar chart of responses to Question 2 for this group is shown in Figure 66.

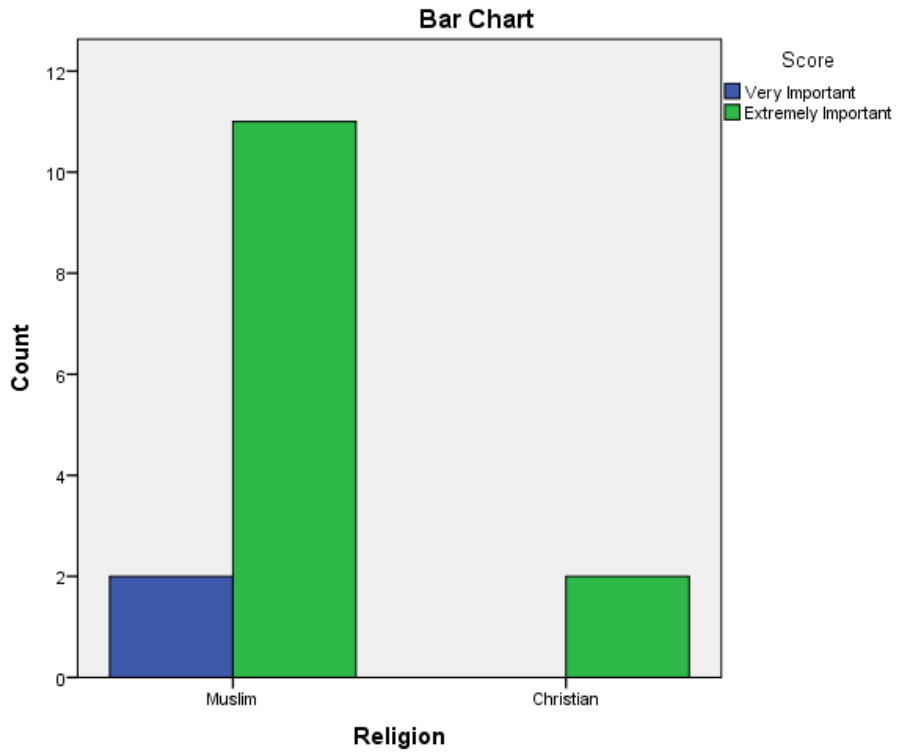

Figure 66: Medium Exposure Group Responses to Question 2 By Religious Affiliation

This treatment group does not share the variation seen in the High Exposure group, with 100 percent of Christians and 84.6 percent of Muslims considering the issue "extremely important". This does not support RH6 as the treatment appears to have had the same effect regardless of religious affiliation. A Chi-Square test of association was conducted to establish whether the association between religious affiliation and response was statistically significant, as displayed in Table 73 on page 231 in Appendix B.

The results of this test do not support RH6 as Chi-Square(1) = 0.355 and P = 0.551, demonstrating that there is no significant association between the variables for this treatment group. As both Muslim and Christian participants considered the issue as important, RH6 is not supported. The hypothesis also implies that even without treatment, there should be differences of response between religious groups. Figure 67 shows the charting of responses for the No Exposure group.

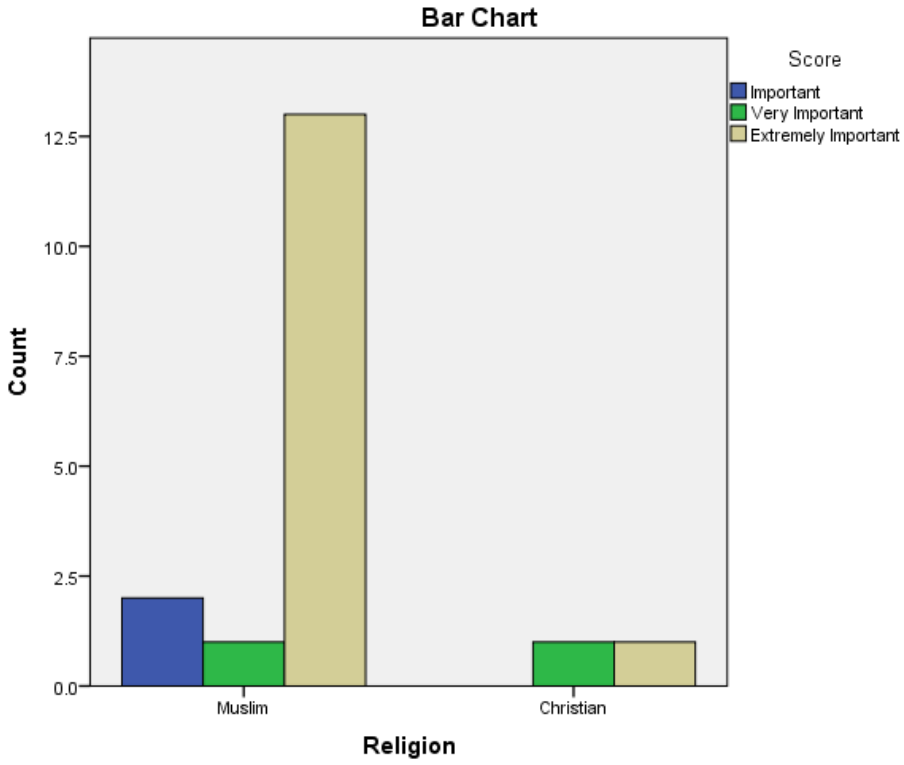

Figure 67: No Exposure Group Responses to Question 2 By Religious Affiliation

Similar to the High Exposure group, participants in this group have some variation in responses by religious affiliation. 81.2 percent of Muslim participants consider the issue "extremely important" as compared with 50 percent of Christian participants. In order to test the significance of this association, a Chi-Square test of association was conducted. The results are shown in Table 58.

Table 58

Chi-Square Analysis of No Exposure Group Question 2 According to Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.536[a]	2	.171
N of Valid Cases	18		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .22.

Table 58

With Chi-Square(2) = 3.536 and P = 0.171, there is no significant association between religious affiliation and response to Question 2 for this group. This result partially supports RH6 as there is a weak association between issue salience and religious affiliation for this measure. The bar chart of responses for the No-Facebook Control group, as seen in Figure 68, further supports the hypothesis.

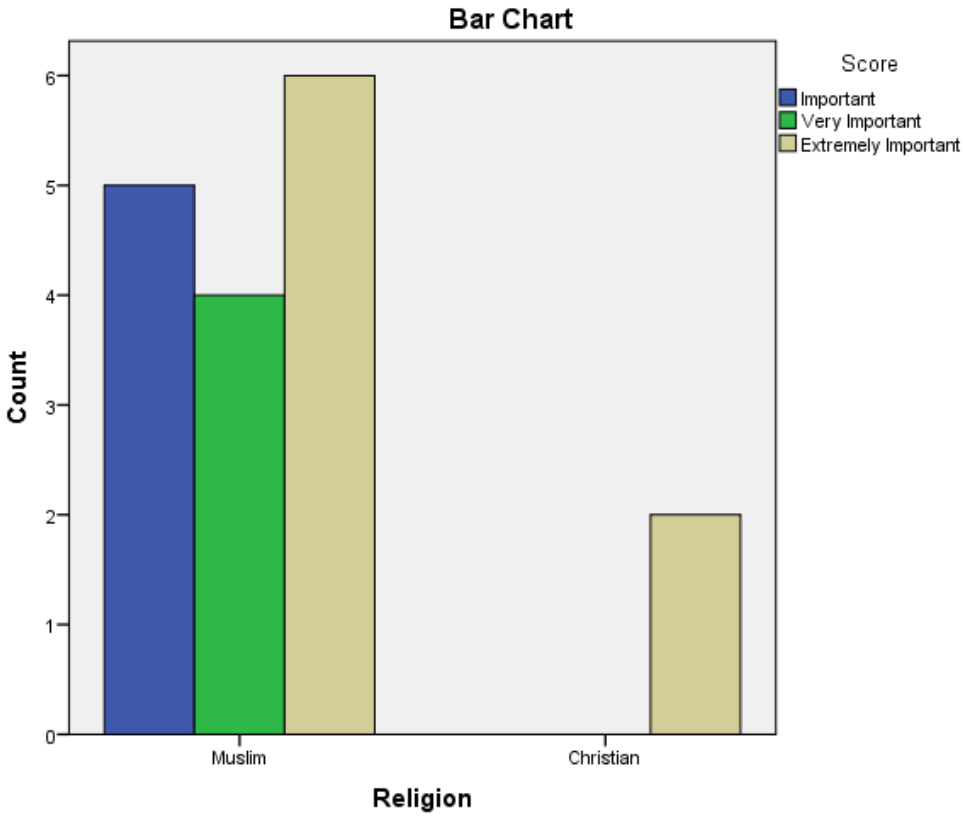

Figure 68: No-Facebook Control Group Responses to Question 2 By Religious Affiliation

As in the No Exposure group, this group had a greater variation in responses among Muslim participants than Christian participants. The differences support RH6 as the variation suggests some natural association between issue importance and religious identity. A Chi-Square test of association was conducted to determine whether this association was statistically significant. Table 76 on page 232 in Appendix B displays the results of this test.

As in the No Exposure group, the association is not significant as Chi-Square(2) = 2.550 and P = 0.279. This supports RH6 as a weak association occurred in both non exposure groups. Overall, Question 2 provides some contradictory data that partially supports RH6, as three groups has significant or near significant variation by religious affiliation. As seen in Appendix B, tabulations of the responses

by religious affiliation and Chi-Square tests (Tables 71 – 76) further highlight these differences.

RH6: Question 4

The second measure on the posttest, Question 4, asked participants to evaluate the degree to which candidates in the parliamentary elections should worry about the issue of ignorance/illiteracy in Egypt. RH6 posits that participants of different religious affiliations will differ in their evaluations as a result of exposure to the treatment. Figure 69 has the tabulation of responses to this question for the High Exposure group.

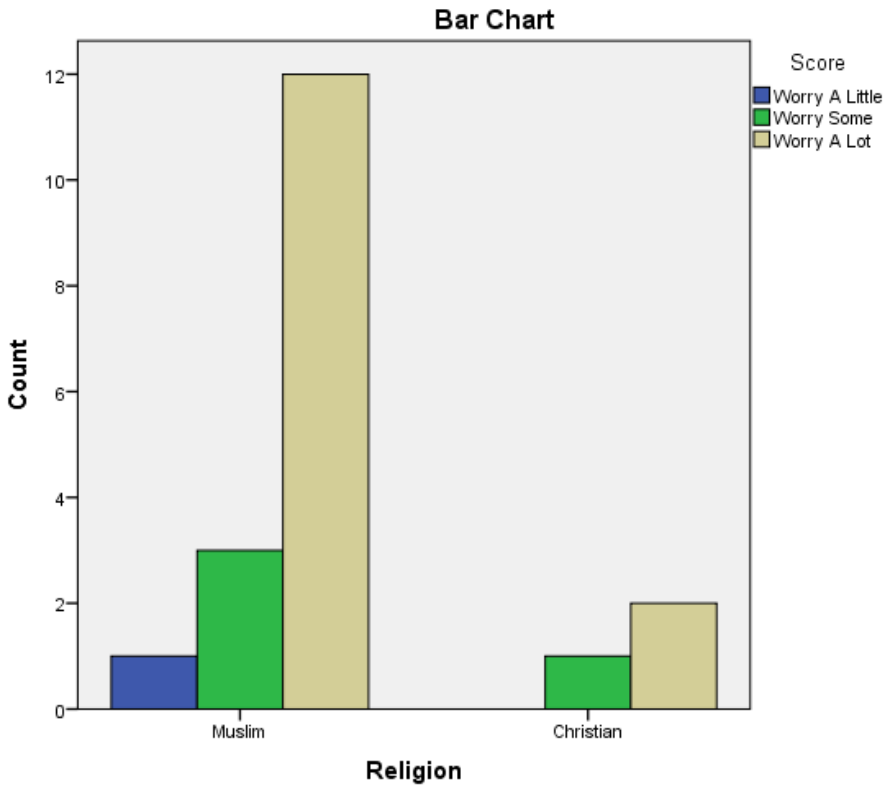

Figure 69: High Exposure Group Responses to Question 4 By Religious Affiliation

While there are less Christian participants than Muslim participants in this treatment group, the distribution of responses to Question 4 is similar proportionally. The chart does not support RH6 as a majority of both Muslim participants (75 percent) and

Christian participants (66.7 percent) thought candidates should "worry a lot" about the issue. As the distribution of responses is similar for both Muslim and Christian participants, the hypothesis is not supported. In order to determine if these responses were significantly associated with religious affiliation, a Chi-Square test of association was performed. The results of this test are shown in Table 78 on page 233 in Appendix B.

This test of association also does not support RH6, as Chi-Square(2) = 0.467 and P = 0.792, indicating that there is no statistically significant association between religious affiliation and response to Question 4 for this group. Despite the exposure to the treatment media, participants responded similarly to the question regardless of religious affiliation. The Medium Exposure group also had relatively high proportions of both Muslim (80 percent) and Christian (100 percent) participants responding that candidates should "worry a lot" about the issue. The bar chart of results for this group is shown in Figure 70.

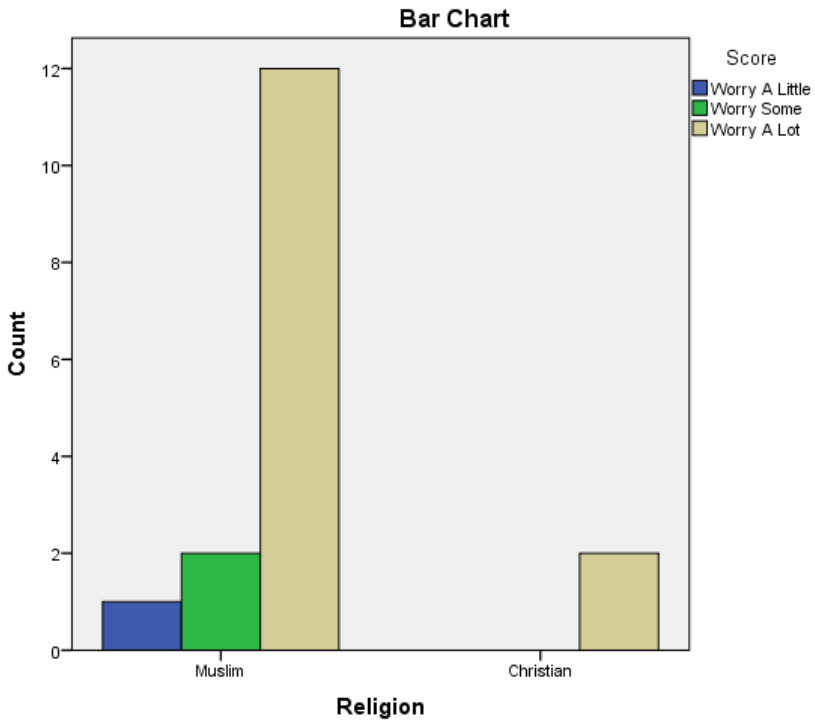

Figure 70: Medium Exposure Group Responses to Question 4 By Religious Affiliation

The pattern of responses for this group also does not support RH6 as the distribution of responses does not vary by religious affiliation. While some Muslim participants also responded that candidates should "worry a little" or "worry some", the greatest proportion of respondents chose the response that candidates should "worry a lot". A Chi-Square test of association was performed to determine if there was a significant association between religious affiliation and salience for this group in this measure. Table 80 on page 234 of Appendix B displays the results of this test..

With Chi-Square(2) = 0.486 and P = 0.784, there is no significant association between religious affiliation and responses to Question 4 for this group. RH6 is also not supported by this measure as the treatment group did not have this statistically significant association. The two groups with no exposure to the issue, the No Exposure and No-Facebook Control, had a smaller range of responses than either treatment group. The bar chart of responses for the No Exposure group is shown in Figure 71.

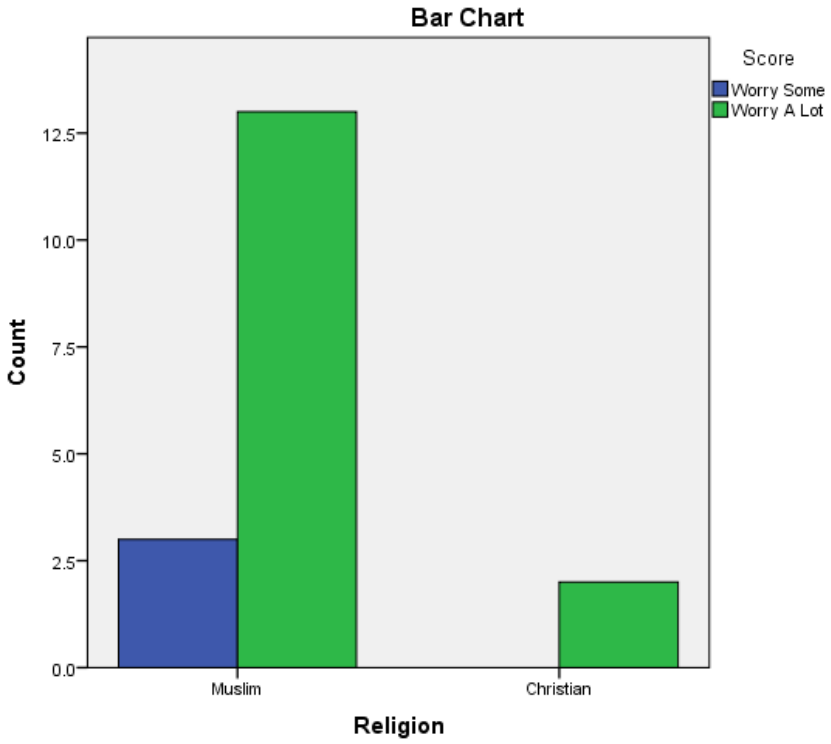

Figure 71: No Exposure Group Responses to Question 4 By Religious Affiliation

The proportion of Muslim and Christian participants who thought that candidates should "worry a lot" about the issue" was nearly the same as that of Medium Exposure group (with 81.2 percent of Muslims and 100 percent of Christians). As this proportion is similar to the treatment groups, RH6 is not supported. In order to determine whether a natural association exists between the responses and religious affiliation, a Chi-Square test of association was conducted, as seen in Table 82 on page 235 in Appendix B.

As Chi-Square(1) = 0.450 and P = 0.502, there is no significant association between the responses and religious affiliation in this group with no exposure to the issue. This finding also does not support RH6 as no association between the variables occurs. The No-Facebook Control group has nearly the same proportion of Muslim and Christian participants who thought candidates should "worry a lot" about the issue as the No Exposure group. Figure 72 shows the graph of responses for this group.

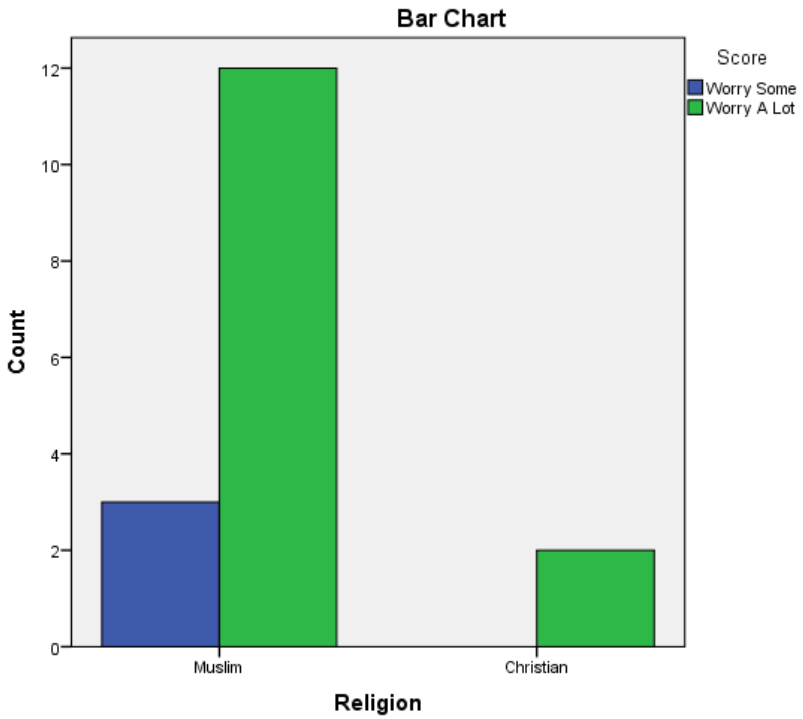

Figure 72: No-Facebook Control Group Responses to Question 4 By Religious Affiliation

These results do not support RH6 as the proportion of Muslim to Christian participants in the "worry a lot" category is the same as in the Medium Exposure group. A Chi-Square test of association was performed to establish whether the association between responses and religious affiliation was statistically significant. Table 84 on page 236 in Appendix B displays the results of this test.

With Chi-Square(1) = 0.486 and P = 0.486, there is no significant association between the variables, not supporting RH6. The overall results of the second measure (Question 4) also do not support the hypothesis. The proportion of Muslim and Christian participants who thought that candidates should "worry a lot" about the issue remained relatively the same across treatment groups, indicating no differences by religious affiliation on participants' issue salience. This partially answers RQ2, as the demographic factor of religious affiliation does not seem to influence issue salience. Tabulations of the responses to this question and Chi-Square tests (Tables 77 - 84), as seen on pages 233 - 236 in Appendix B, display this similarity of results.

RH6: Question 5

The third measure (Question 5) asked participants how often they talked about the issue of ignorance/illiteracy in Egypt. The responses of each group were divided on the basis of religious affiliation and Chi-Square tests of association were performed in order to test RH6. The hypothesis predicted that the responses will differ depending on religious affiliation for the two treatment groups. There is substantial variation in the responses for this measure for the High Exposure group, as seen in Figure 73.

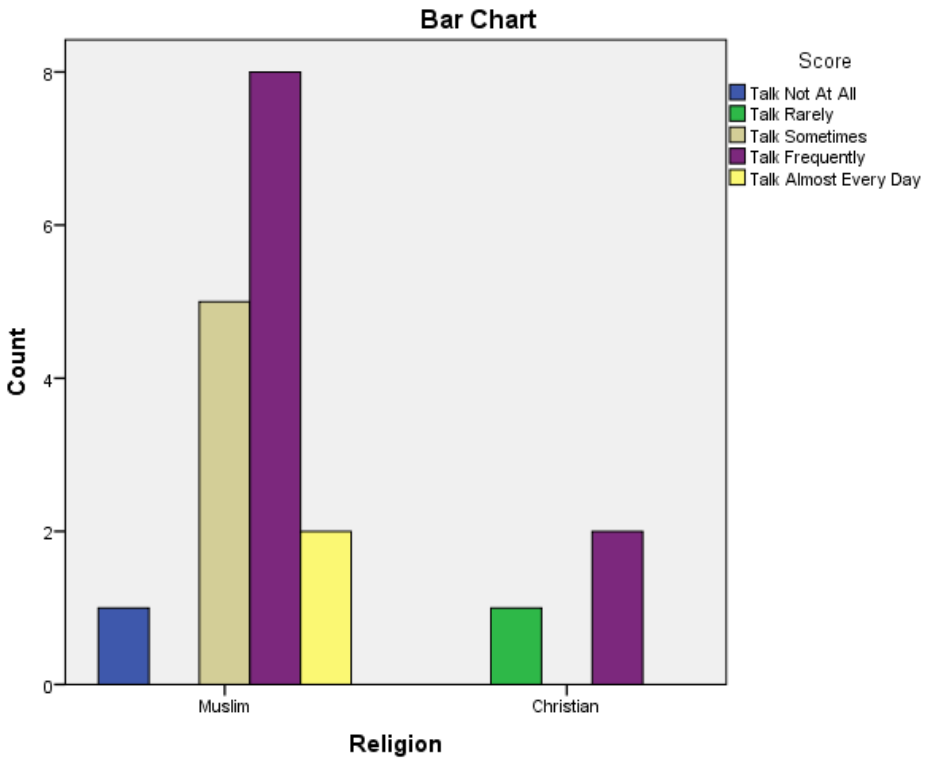

Figure 73: High Exposure Group Responses to Question 5 By Religious Affiliation

While 50 percent of Muslim participants in this group talked "frequently" about the issue as did 66.7 percent of Christian participants, there is greater variation among the responses of the Muslim group than the Christian group. Muslim participants had responses ranging from talking "not at all" about the issue to talking "almost every day" about the issue. Christian participants only either talked "rarely" or "frequently" about the issue. A Chi-Square test of association was performed to determine whether religious affiliation was associated with kind of response to Question 5 for this treatment group. Table 59 displays the results of this test.

Table 59

Chi-Square Analysis of High Exposure Group Question 5 According to Religious Affiliation

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.967[a]	4	.138
N of Valid Cases	19		

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .16.

Table 59

Although the association is not significant, Chi-Square(4) = 6.967 and P = 0.138, indicating a relatively strong association between the variables in this measure. Compared with the Christian participants, a greater proportion of Muslim participants choose responses indicating higher issue salience, partially supporting RH6. Participants in the Medium Exposure group do not display a similar difference between religious affiliations, as seen in the clustered bar chart in Figure 74.

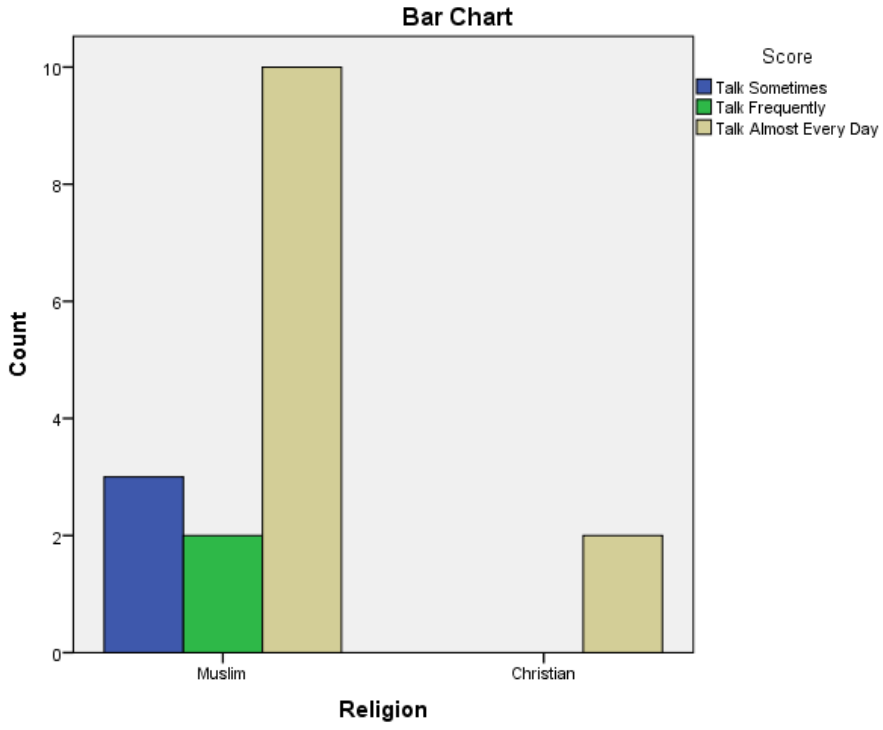

Figure 74: Medium Exposure Group Responses to Question 5 By Religious Affiliation

Both Muslim and Christian participants in this group had less variation in responses than the High Exposure group. However, 100 percent of Christian participants talked "almost every day" about the issue while only 66.7 percent of Muslim participants thought the same. In order to determine if this association was statistically significant, a Chi-Square test of association was conducted. The results of this test are shown in Table 87 on page 238 in Appendix B.

The results of this test do not support RH6, as Chi-Square(2) = 0.944 and P = 0.624, indicating there is no association between religious affiliation and response for this treatment group. The high P value of the test demonstrates that the association is weak between the variables. The No Exposure group has a similar distribution of responses by religious affiliation, as seen in the bar chart of responses in Figure 75.

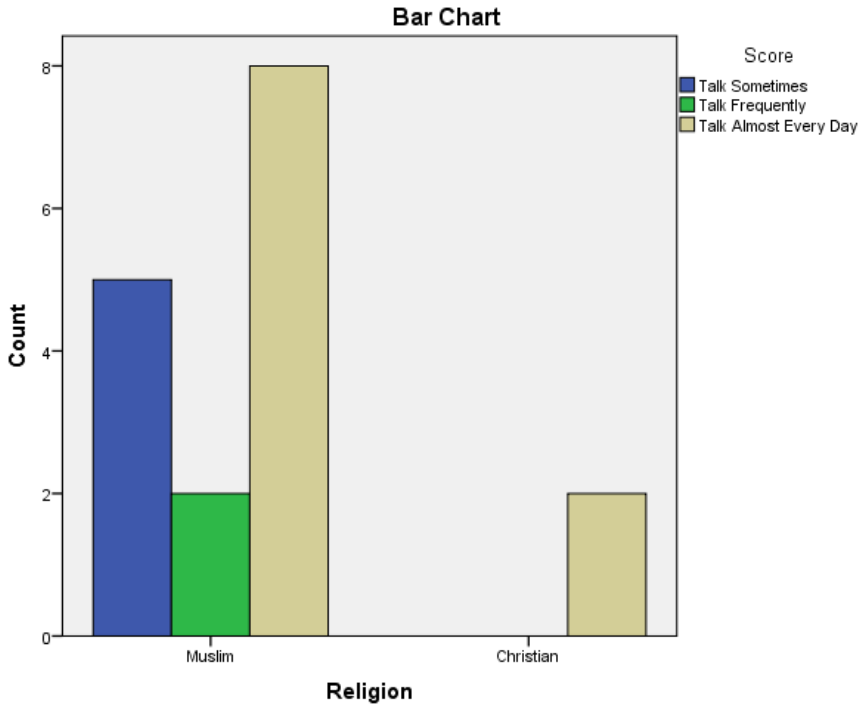

Figure 75: No Exposure Group Responses to Question 5 By Religious Affiliation

Participants in the No Exposure group talked about the issue either "sometimes", "frequently", or "almost every day", just as in the Medium Exposure group. 100 percent of Christian participants again talked "almost every day", the response

indicating the highest degree of issue salience. This does not support RH6 as both Muslim and Christian participants rated the issue highly. A Chi-Square test of association was performed to determine if this association was statistically significant. Table 89 on page 238 of Appendix B displays the results of this test.

With Chi-Square(2) = 1.587 and P = 0.452, there is no significant association between religious affiliation and response to Question 5 for this group. As in the Medium Exposure group (P = 0.624), there is almost no association between the variables in the No Exposure group, not supporting RH6. However, in the No-Facebook Control group, Muslim participants had a wider range of responses than in the No Exposure group. The clustered bar chart of responses for this group by religious affiliation is shown in Figure 76.

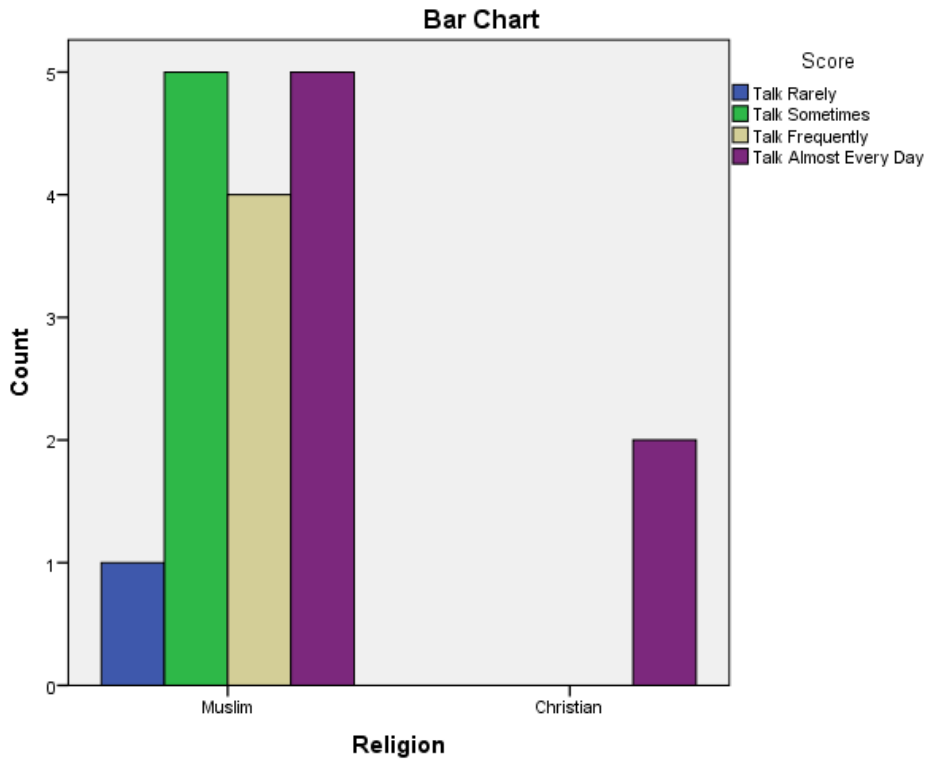

Figure 76: No Exposure Group Responses to Question 5 By Religious Affiliation

The issue salience of this group seems to differ naturally by religious affiliation in this measure, supporting RH6. 33.3 percent of Muslim participants talked "almost every

day" about the issue compared with 100 percent of Christian participants. In order to establish whether the association between religious affiliation and these responses was statistically significant, a Chi-Square test of association was performed as seen in Table 91 on page 239 of Appendix B.

The results of this test support RH6 as Chi-Square(3) = 3.238 and P = 0.355, indicating that there is a weak association between religious affiliation and the responses to this measure. RH6 is partially supported by Question 5 as the High Exposure group had a low P value (P = 0.138), indicating that religious affiliation may play a role in participants' issue salience. The tabulations and Chi-Square tests (Tables 85 - 91) on pages 237 - 239 in Appendix B show this variation as compared to the other groups for this measure. However, as none of the groups had a significant association between religious affiliation and the responses, RH6 is not supported by Question 5.

RH6: Index Scores

The responses to the three measures were added into an index score between 1 and 14 for each participant. These index scores were tabulated by religious affiliation for each group and Chi-Square tests of association were conducted to establish the presence of significant associations between religious affiliation and index score. RH6 predicted that there would be significant associations between religious affiliation and the index score for the treatment groups, indicating an influence of this demographic factor on issue salience. Figure 77 displays the bar chart of index scores by religious affiliation for the High Exposure group.

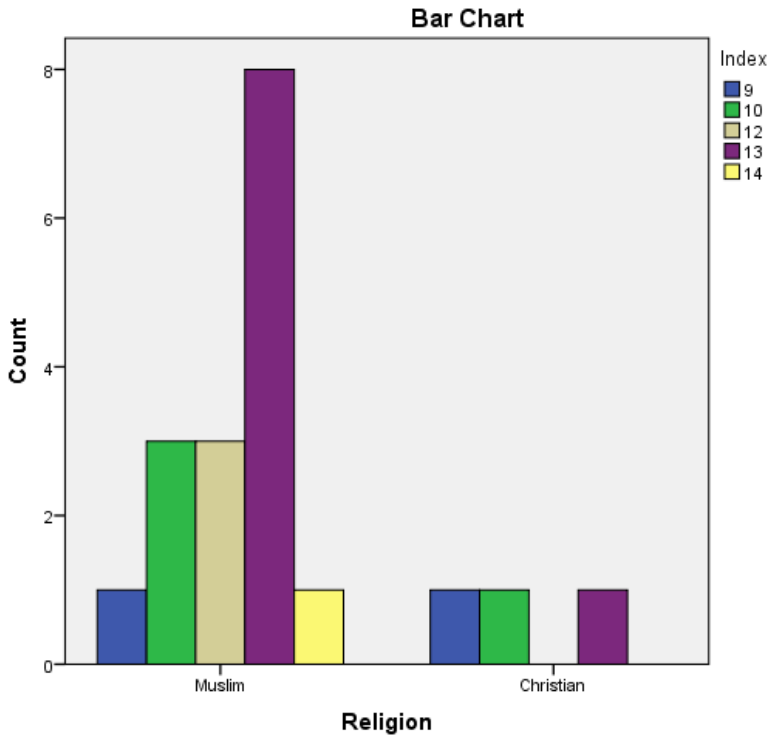

Figure 77: High Exposure Group Index Scores By Religious Affiliation

The index scores for Muslim and Christian participants show some variation, as the highest score received by Christian participants was 13 (with 33.3 percent of participants) while the highest for Muslim participants was 14 (with 6.2 percent of participants). While this variation supports RH6, a Chi-Square test of association was performed to determine whether the association between religious affiliation and index score was statistically significant. Table 93 on page 240 in Appendix B shows the results of this test.

The results of this test do not support RH6 as Chi-Square(4) = 2.914 and P = 0.572, revealing that there is no significant association between the variables for this treatment group. The Medium Exposure group has less variation among Christian participants than in the High Exposure group, with 100 percent receiving the index score of 14. The tabulation of responses for this group is shown in Figure 78.

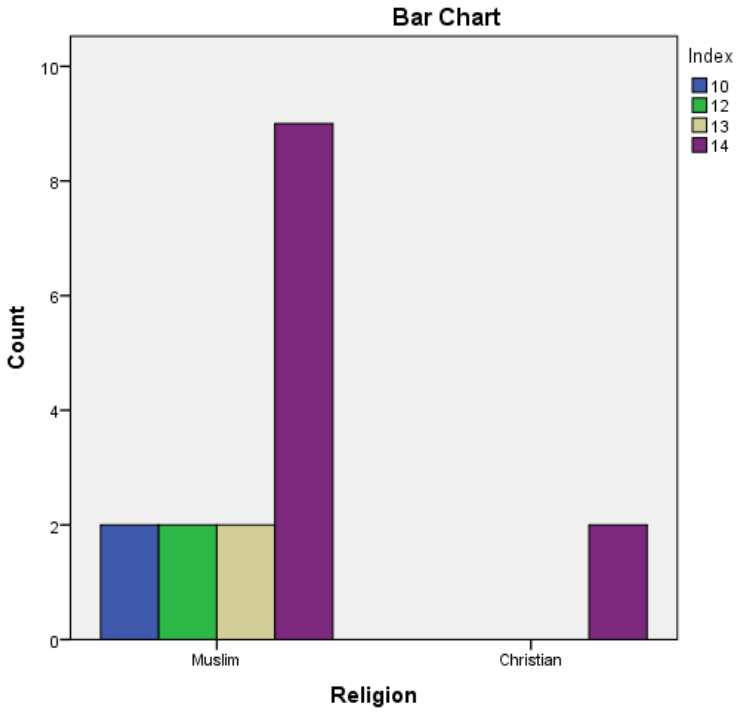

Figure 78: Medium Exposure Group Index Scores By Religious Affiliation

The Muslim participants in this group show less variation than in the High Exposure group, receiving higher scores overall from 10 to 14 rather than from 9 to 14. 60 percent of Muslim participants also received the highest index score of 14, indicating that both Muslims and Christians in this group had a high level of issue salience and not supporting RH6. A Chi-Square test of association was conducted to test whether the association between religious affiliation and response was significant for this treatment group. Table 95 on page 241 in Appendix B displays the results of this test.

With Chi-Square(3) = 1.236 and P = 0.744, the results of this test do not support RH6 as there is no statistically significant association between the variables. The high P value indicates a low level of association, demonstrating that religious affiliation did not determine issue salience for this treatment group, partially answering RQ2. The scores of the No Exposure group have greater variation than in the Medium Exposure group, with a distribution similar to that found in the High

Exposure group. The clustered bar chart of index scores by religious affiliation for this group is seen in Figure 79.

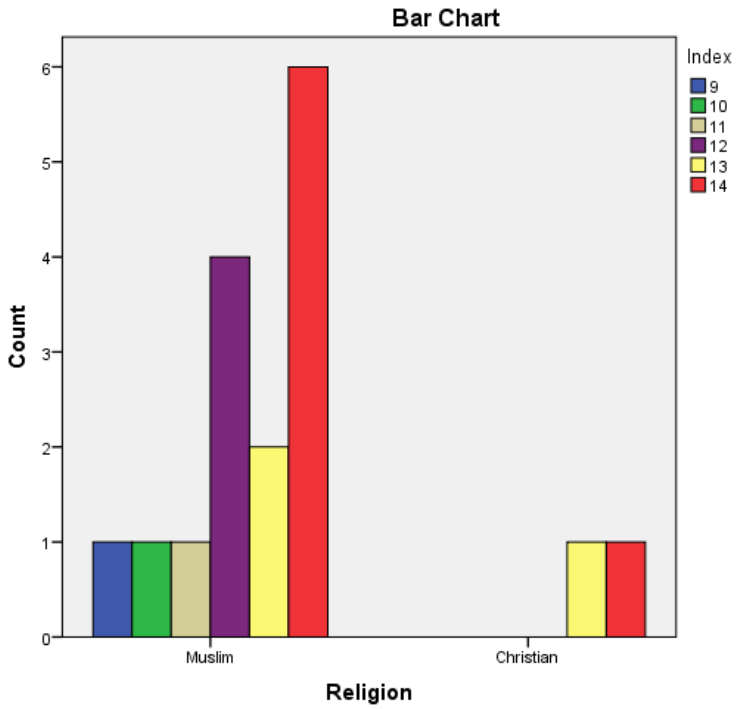

Figure 79: No Exposure Group Index Scores By Religious Affiliation

Christian participants in this group are evenly divided between the scores 13 and 14 while Muslim participants had index scores ranging from 9 to 14. In comparison to the Christian group, only 53.3 percent of the Muslim participants received a score of 13 or 14. The differences between scores by religious affiliation support RH6 as this affiliations have different levels of salience. In order to determine if this association was statistically significant, a Chi-Square test of association was performed. Table 97 on page 242 of Appendix B shows the results of this test.

The result of this test does not support RH6 as Chi-Square(5) = 2.321 and P = 0.803, meaning there is no association between religious affiliation and index score for this group. As the P values decrease with exposure to treatment, religious affiliation does appear to have a non-significant association with index scores, supporting RH1. The No-Facebook Control group demonstrates a similar variation

among Muslim participants in index scores, yet 100 percent of Christian participants received index scores of 14. The clustered bar chart of index scores for this group is displayed in Figure 80.

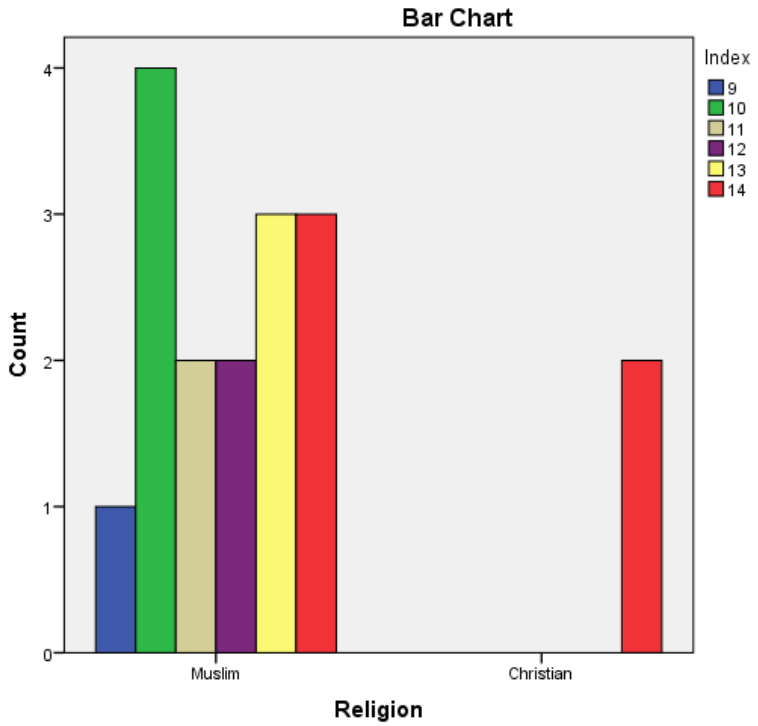

Figure 80: No-Facebook Control Group Index Scores By Religious Affiliation

The Muslim respondents in this group received lower index scores than in the other groups, with the greatest proportion (26.7 percent) receiving a score of 10. The difference between Muslim and Christian participants in terms of index scores supports RH6, as Christians appear to have a greater degree of issue salience than Muslims. In order to establish if this association was statistically significant, a Chi-Square test of association was conducted. The results of this test are shown in Table 99 on page 243 of Appendix B.

This result partially supports RH6 as Chi-Square(5) = 5.440 and P = 0.365, meaning that there is a weal association between index score and religious affiliation. However, as all of the groups did not have index scores significantly associated with religious affiliation, RH6 is not supported by these results. While the High Exposure

group received a higher P value than the Medium and No Exposure groups, the No Exposure group had the lowest, indicating that the treatment may have affected this association, supporting RH1. Tabulations of these scores and Chi-Square tests for the groups (Tables 92 - 99), as seen on pages 240 - 243 in Appendix B, show how participants received similar scores despite religious affiliation. The results also partially answer RQ2, as the demographic factor of religious affiliation does not influence participants' changes in issue salience.

RH6: Rating

The posttest measure of rating was used to evaluate participants' issue importance in comparison with other issues. The ratings for each participant were tabulated according to religious affiliation and Chi-Square tests of association were performed in order to test RH6. Lower ratings indicate greater issue importance. Muslim participants in the High Exposure group had a wide range of rating scores from 1 to 7 while Christian participants judged the issue either 4^{th} or 5^{th} in importance. Figure 81 displays the tabulation of rating scores by religious affiliation for this group.

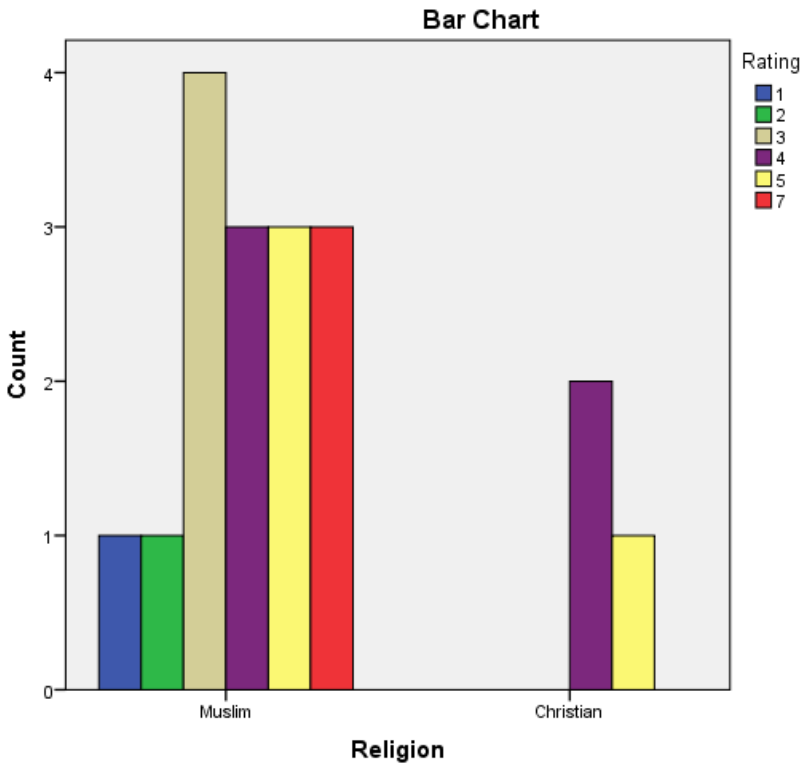

Figure 81: High Exposure Group Rating Scores By Religious Affiliation

While 40.1 percent of Muslim participants in this group rated the issue as a 3 or higher, the highest score of the Christian participants was 4. This variation supports RH6 as Muslim participants rated the issue as more important than Christian participants. In order to determine if this association was statistically significant, a Chi-Square test of association was performed. The results of this test can be found in Table 101 on page 244 in Appendix B.

This result does not support RH6 as Chi-Square(5) = 3.960 and P = 0.555, indicating that there is no significant association between rating score and religious affiliation for the group with the highest exposure to the issue. The Medium Exposure group is also predicted by RH6 to have a significant association between rating score and religious affiliation. In this group, the distribution of rating scores for Christian participants is the same as in the High Exposure group, while there is a

narrower range of scores for Muslim participants. Figure 82 displays the clustered bar chart of ratings by religious affiliation for this group.

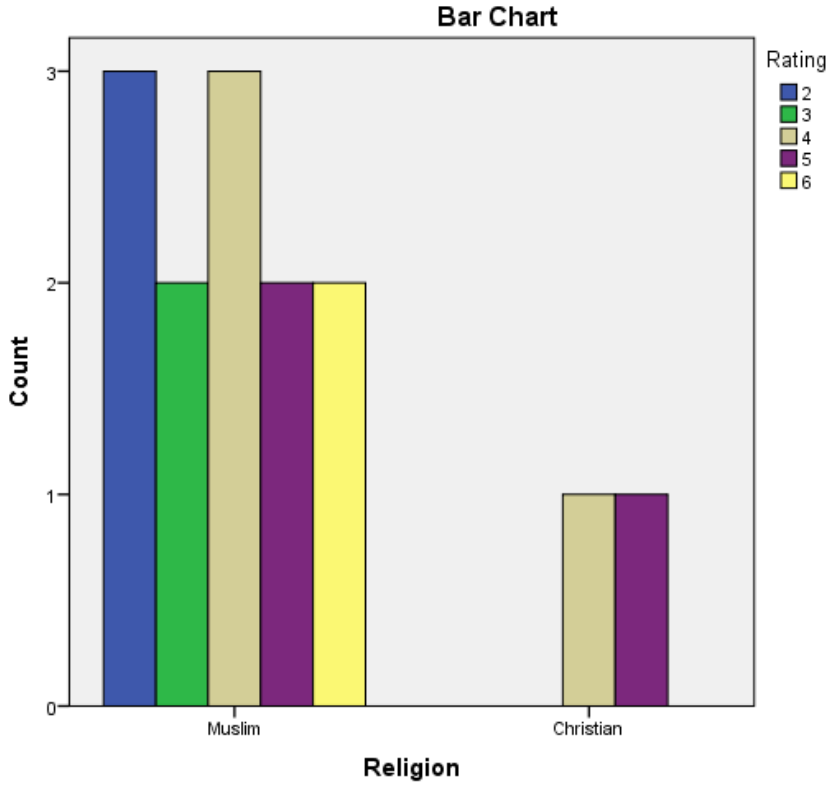

Figure 82: Medium Exposure Group Rating Scores By Religious Affiliation

For this group, the issue was more important to Muslim participants, with 41.7 percent of participants rating the issue 2nd or 3rd in importance. Christian participants were again equally split between the 4 and 5 ratings. While these differences appear to support RH6, a Chi-Square test of association was performed to determine if the association between religious affiliation and rating score was significant. The results of this test are shown in Table 103 on page 245 in Appendix B.

With Chi-Square(4) = 2.431 and P = 0.657, the results do not support RH6 as there is no significant association between the variables for this treatment group. While the P value is higher than that of the High Exposure group, possibly indicating some influence of the treatment, both treatment groups had no significant association between religious affiliation and rating score. Several participants did not complete

the rating measure on the posttest, resulting in a lopsided proportion of Muslim to Christian participants in the No Exposure group. The bar chart of rating scores by religious affiliation for this group is shown in Figure 83.

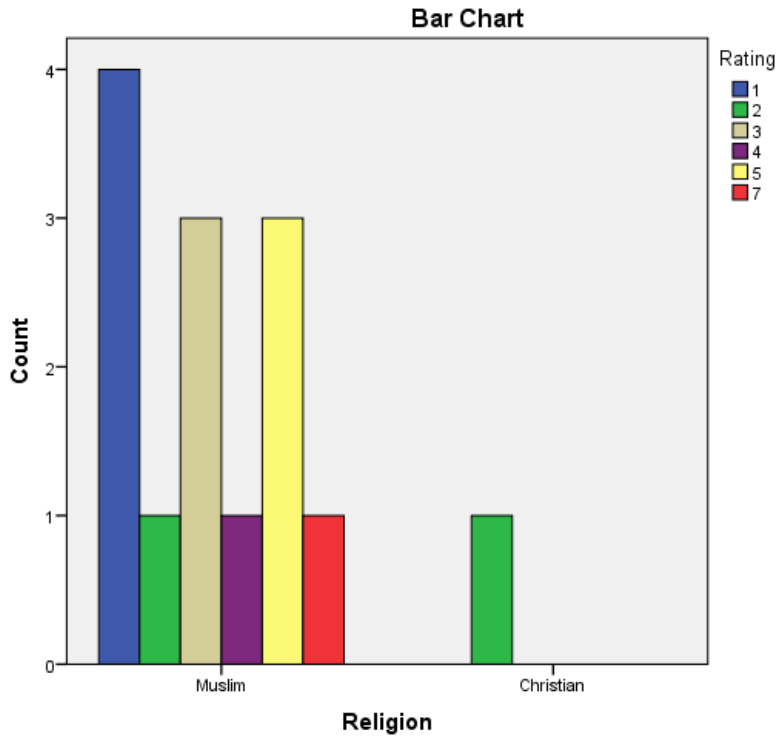

Figure 83: No Exposure Group Rating Scores By Religious Affiliation

As in the High Exposure group, Muslim participants had a wide range of rating scores from 1 to 7. The only Christian participant to complete this measure rated the issue as 2nd in importance. A Chi-Square test of association was performed to establish whether the rating scores in this group were significantly associated with religious affiliation without exposure to the issue. Table 105 on page 246 in Appendix B shows the results of this test.

The results of this test partially support RH6, for Chi-Square(5) = 6.462 and P = 0.264, indicating that there is a weak association between the variables for the No Exposure group. Both Muslim and Christian participants in the No-Facebook Control group rated the issue as the highest degree of importance. The bar chart of responses for this group is found in Figure 84.

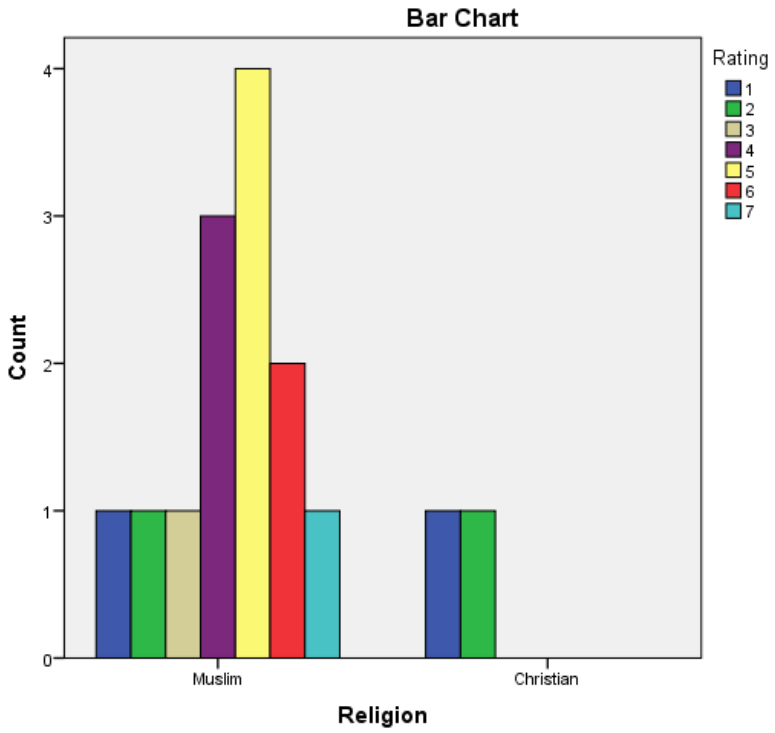

Figure 84: No-Facebook Control Group Rating Scores By Religious Affiliation

Unlike in the High and Medium Exposure groups, Christian participants considered the issue of ignorance/illiteracy in Egypt as either 1st or 2nd in importance. Muslim participants again had a wide range of rating scores from 1 to 7. These scores support RH6 as there appears to be differences in scores by religious affiliation. In order to determine whether the association between these ratings was statistically significant, a Chi-Square test of association was performed. The results of this test are shown in Table 107 on page 247 in Appendix B.

With Chi-Square(6) = 6.346 and P = 0.386, RH6 is partially supported as there is a weak association between religious affiliation and rating score for this group. Once again the P value is lower than both treatment groups, indicating a stronger association than in groups with exposure to the treatment, partially supporting RH1. The tabulations of the scores by religious affiliation and Chi-Square tests (Tables 100 - 107), as seen on pages 244 - 247 in Appendix B, clearly show the differences in

rating score distribution of the groups. These results further answer RQ2 in that the demographic factor of religious affiliation does not have a significant association with rating scores even after exposure to the treatment Participants were affected by the treatment regardless of religious affiliation, except in the case of the High Exposure group in Question 2. Overall, however, RH6 was not supported by the data.

CHAPTER SIX - Discussion and Conclusions

Research Questions and Hypotheses

The first research question of this study asked whether the presence of information on a Facebook profile about an issue resulted in an increase of the issue's salience to the user. The first hypothesis (RH1) posited that this information would influence the issue salience of the user. The second hypothesis (RH2) predicted that users exposed to a single issue would have a greater shift in issue salience than users exposed to multiple issues. The overall results of the experiment indicate that this information does affect the issue salience of the user, but not significantly except in some cases. Only three instances of statistically significant and near significant findings concerning RH1 and RH2 occurred, in the first measure, third measure, and index score analysis.

In the comparison of posttest means by group for Question 2, both treatment groups had higher means and mean changes (*M*) than the groups not exposed to the issue of ignorance/illiteracy. An ANOVA test revealed a statistically significant difference between the groups at P = 0.035 for the measure as well. The post-hoc Tukey test revealed that the Medium Exposure and No-Facebook Control groups had a statistically significant difference at p = 0.023, supporting both RH1 and RH2. In the third measure (Question 6/5), a near significant difference was found between the pretest and posttest means of the Medium Exposure group, with *M* = 2.5211 at p = 0.083. While the ANOVA test yielded a significant difference among the posttest means for this measure as well at p = 0.019, the post-hoc Tukey test revealed that the difference was between the Medium Exposure and High Exposure groups with p = 0.016, not supporting RH2. Furthermore, the High Exposure group had a negative

mean change of *M* = - 0.7518, indicating that participants had a lesser degree of issue salience for this measure after exposure to the treatment, also not supporting RH1. The final measure revealing near-significant differences in the treatment groups was the index scores, in which the differences among the group means decreased from p = .303 in the pretest to p = 0.055 in the posttest. The post-hoc Tukey test for this measure demonstrated near significant differences in the posttest between several groups, while in the pretest the p values were much higher. In the pretest post-hoc Tukey test, the p value between the High and Medium Exposure group index scores was 0.369. For the Medium Exposure and No-Facebook Control groups, the p value was 0.325. After the experiment and application of the treatment, these p values changed to 0.065 and 0.142, respectively. These values indicate that the treatment caused near significant differences between the Medium Exposure treatment group and the No-Facebook Control group, supporting RH1.

The highest mean index score and mean change of all the groups was held by the Medium Exposure group (M = 94.118, *M* = 2.9413), supporting both RH1 and RH2. However, RH2 was not supported by the data as the High Exposure group was the only group to show a negative mean change (*M* = - 0.7518) and had a mean of 84.5864, similar to that of the No-Facebook Control group (M = 85.7143). With the exception of the second measure (Question 4), the Medium Exposure group had a positive mean increase in all three measures and had the second lowest rating score of issue importance, indicating that participants were affected by the treatment. Therefore, the first research question is answered in the affirmative, as exposure to information about an issue on Facebook did have an effect on the issue salience of that issue for participants in the Medium Exposure group.

The second research question asked whether demographic factors influenced issue salience. The first research hypothesis for this question (RH4) predicted that freshmen participants would have a greater issue salience than participants in higher levels of education. While no statistically significant associations were found in the treatment groups between class level and participant response, three nearly significant results were found in three of the measures of salience. Chi-Square tests of association revealed that several associations between class level in college and responses had near significant p values. In Question 2, more High Exposure group participants in the senior class considered the issue important than those in the freshmen class, with a p value of 0.090. RH4 was not supported by this finding as participants in lower classes of college did not show a higher degree of issue salience than participants in higher classes, but rather the opposite. However, two other near-significant findings ($p = 0.054$ for Question 4 and $p = 0.064$ for Question 5) occurred in the No-Facebook Control group, the first not supporting RH4 and the second supporting RH4. These three results partially answer RQ2, as level of college education may have determined issue salience in some cases. Despite this, RH4 was not supported by the direction of the data in Question 2, meaning that class level did not significantly influence the change in issue salience for participants in this study.

The second research hypothesis (RH5) of RQ2 posited that gender would influence the issue salience of participants. Several significant and near significant associations were found between gender and the responses of participants in treatment groups. In the third measure (Question 5), there was a strong association between gender and how frequently participants talked about the issue in the High Exposure group at $p = 0.037$. Female participants in this group had higher proportions of participants talking "frequently" or "almost every day" about the issue (71.4 percent

and 7.1 percent to 20 percent and 0 percent of males, respectively). However, a significant association between gender and response to the first measure (Question 2) was also found in the No Exposure group at p = 0.044. Male participants in this group rated the issue "important" or "extremely important" while female participants rated the issue as "very important" or "extremely important". This result supports RH5 as male participants had less natural issue salience than female participants. In the second measure (Question 4), near significant associations were found between gender and response in the High Exposure, Medium Exposure, and No Exposure groups (with p values of 0.082, 0.142, and 0.099). In all of these groups, a smaller proportion of male participants than female participants thought that candidates in the elections should worry "some" or "a lot" about the issue of ignorance/illiteracy in Egypt. As three of the groups showed some association between the variables for this measure, RH5 is supported. Another near significant association was found between gender and index scores for the High Exposure group with p = 0.098. Male participants had index scores between 9 and 12 while female participants had higher scores between 9 and 14, with 71.4 percent of female participants having a score of 13 or above. These results appear to support RH5, as male participants in the treatment groups had lower measures of issue salience than female participants. As similar patterns occurred in the No Exposure group, the issue could have had less salience for males than for females in general regardless of treatment.

The third research hypothesis (RH6) of RQ2 predicted that religious affiliation would also influence issue salience for participants. A significant association of p = 0.030 between religious affiliation and response was found for the High Exposure group in the first measure (Question 2). The proportion of Christian participants rating the issue as "important" was 66.7 percent, compared with 81.2 of Muslim

participants who rated the issue as "extremely important". In the third measure (Question 5), a near significant association of p = 0.138 was found in the High Exposure group between religious affiliation and response. Muslim participants had more variation in responses than Christian participants, yet overall talked more about the issue (93.7 percent talking "sometimes" or more) than Christian participants (with 66.7 percent talking "frequently"). While the results from these two measures suggest that Muslim participants were more affected by the treatment than Christian participants, no other results suggested an association between religious affiliation and response to the measures. Thus, RH6 was not supported by the data.

Limitations of the Study

As a field experiment, this study had lower levels of control than a study conducted in a laboratory setting. While participants were told to watch or read the media on their Facebook accounts during the course of the study, this process was not observed by the researcher. Participants were told to record a one sentence summary of each media item and return the sheet during the posttest session, yet only a few participants completed this task. As a result, not all participants in treatment groups may have been exposed to the full treatment. Also, while longer than some of Iyengar and Shanto's (1987) television experiments, the time frame of the study may not have led to a realistic manipulation of the participants' Facebook profiles. Media items were posted more frequently (three times daily) than in real life, which could have led to a process of maturation, with the participants feeling overwhelmed by the amount of items. Such a process could explain the negative mean change in the index scores of the High Exposure group, which decreased by - 0.7518 during the study. Finally, participants were not told to avoid other media, and could have been exposed to

outside information or other variables, affecting their salience of the issue of ignorance/illiteracy in Egypt.

The sample used in this study was selected from students of the American University in Cairo who were enrolled in several courses in the Journalism and Mass Communication department. This sample was not fully representative of the population of young Egyptian Internet users as these classes had high proportions of female students. In order to fully test RQ2, the sample should have had equal numbers of male and female participants as well as equal numbers of Christian and Muslim participants. As students of mass communication, some students could also have recognized the purpose of the study from the pretest or posttest questionnaires.

The final two complicating factors in this study include the time frame of the experiment and the rating scales used in the questionnaires. Participants may have been affected by the time of the study, as the data was collected during a time of high political activity - the first parliamentary elections since Egypt's revolution. As a result of this political situation, many participants regarded every issue mentioned in the pretest and posttest as important regardless of treatment group. The rating scales on these questionnaires may have not provided enough variation for participants to accurately indicate the issue salience (with two measures using a 5 point scale and one using a 4 point scale). The data shows that across all groups, the issue of ignorance/illiteracy in Egypt was relatively important, with even the No-Facebook Control group having a mean index score of 85.7143 out of 100. With such a situation of heightened awareness, participants may therefore have been more resistant to the agenda-setting influence of the media in the study.

Discussion of Results

Iyengar and Shanto (1987) conducted their landmark study of priming and agenda-setting in television news to highlight the influence of the medium in American life:

> In just four decades, it has become a comfortable and easy habit, a settled and central institution. As television has moved to the center of American life, TV news has become Americans' single most important source of information about political affairs.

One purpose of this study has been to highlight how social media on the Internet, almost two decades old, is increasingly becoming the "most important source of information about political affairs" for Internet users regardless of nationality in the twenty-first century. While Internet penetration in Egypt has not reached the level of the United States or Western Europe, Egyptian users are among the most active online communities in the world on sites such as Wikipedia (Messieh 2012). After the January 2012 revolution, awareness of social media has skyrocketed in Egypt, with even the ruling Supreme Council of the Armed Forces using both as a communications platform (Koons 2012). The awareness and increasing penetration of social media websites in Egypt is resulting in these sites becoming more and more relevant to Internet users as sources of information. This study implies that like traditional sources of news such as television and newspapers, information on social media websites powerfully shapes users' views of their society and nation.

Although there were relatively few statistically significant results in the data, media posted on Facebook did seem to influence the issue agenda of Egyptian Facebook users in this study. The two measures showing the most change in salience were Question 1 and Question 6/5 (users' perceptions of the overall importance of the issue and how much they talked about the issue). The latter of these two effects

underscores how social media may affect issue salience, as the main characteristic of social media is its promise of expanded interpersonal communication. When information appears on social media, users may be more disposed to view this information as coming from a known individual as opposed to traditional forms of news media. Much like in the theory of Two-Step Flow, this information could have greater salience by coming from opinion leaders in a form of interpersonal communication with the Facebook user. Following the "accessibility bias" hypothesis, the accessible information on social media about a certain issue could lead to an increase in salience for that issue for the Facebook user. As some media on Facebook come from online versions of traditional news sources, such as links to online newspaper articles, the agenda-setting effect of these traditional media may be affected in the process. This study provided an equal mix of media from blogs, videos, and online newspapers in each treatment group yet did not separate groups by media type. Further research is needed to determine what kind of media leads to the greatest shift in issue salience for Facebook users, and to determine whether the influence of agenda-setting in traditional media is amplified by social media.

The comparison of demographic factors to issue salience in this study yielded mostly non-significant associations between the variables. However, certain findings require further investigation, such as the connection between gender and issue importance in Question 5. Male participants seemed to have lower levels of issue salience than female participants in the treatment groups, yet this study did not analyze the change in issue salience from the pretest by gender. By stratifying the sample according to gender, age, religion, and other factors, the study would have been able to better determine this relationship. Instead, the sample was drawn from classes with high proportions of female students and in order to provide the largest

possible sample, participants were assigned to treatment group randomly. However, the results of the gender analysis suggest that demographic factors may play a small role in the agenda-setting process that bears further investigation.

Future Research

Experimentation has proven to be a valid and revealing method for determining agenda-setting effects in new media. Schmitz Weiss and Tremayne (2009), Kook Lee (2010), and Lee (2010) among others illustrate how experiments can reveal agenda-setting effects from online media under laboratory conditions. Similar types of experiments would benefit the exploration of agenda-setting and social media in Egypt, such as exposing participants to treatment media in a laboratory and measuring issue salience before and after. After a pretest, participants would be exposed to personalized yet manipulated Facebook profiles (instead of online newspapers or manipulated websites) containing media pertaining to a particular issue. Following a period of browsing the participants would then rate the issue with similar measures to those found in the present study. Such an experiment would also allow researchers to further investigate the role of priming effects on social media, as well as existence of multiple levels of agenda-setting, such as issue attributes. In addition to experiments testing immediate effects, experiments with longitudinal designs are needed to test change in issue salience over time. A longitudinal experiment would test issue salience of participants immediately after the treatment as well as after a period of time, to better understand the presence or absence of agenda-setting effects. Through a combination of laboratory and longitudinal experiments, the role of social media in agenda-setting will be greatly revealed.

Egypt is particularly suited to the study of agenda-setting and social media, as an increasing popularity of social media has swept the country since the January 25th Revolution. Particular areas of future research could lie in how protesters used social media to influence the agenda of traditional media, whether newspapers or television. The past year has had numerous unfortunate political situations where social media played a pivotal role in the spreading of information, as in December when social media spread images of demonstrators being beaten by security forces. With such importance given to social media in Egypt, research should focus on how social media users interact with the social media agenda.

Facebook is not the only form of social media with agenda-setting potential. Further research is needed into the influence of information on the Twitter and YouTube websites among users, especially those in Egypt. Field and laboratory experiments, in addition to content analysis, would provide researchers with a wealth of information on the impact of social media on users' issue agendas. As Internet penetration and participation in social media expands throughout Egypt and the world, the relationship between this medium and the agenda-setting effect grows continually more relevant. Young people worldwide are increasingly turning to social media websites as unbiased and uncensored sources of information, and these websites may be supplanting the former dominance of traditional news media. Longitudinal research is needed to establish how these young people form opinions online and behave offline, in order to truly determine the impact of possible agenda-setting effects. Further study of this agenda-setting effect will increasingly reveal how users interact with the information on social media websites, and perhaps better educate these users on the merits and challenges of living in the age of the wired society.

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Appendix A

Pilot Survey (Distributed Online November 26, 2011):

Egyptian Issues

1. How often do you get your news from these sources?

	Never	Sometimes	Often	Always
Newspapers	_____	_____	_____	_____
Television	_____	_____	_____	_____
The Internet	_____	_____	_____	_____

Other (please specify media type and how often you use it):

_____

2. What are the six most important problems facing Egypt today? (such as religious intolerance, corruption, etc.)

One _____

Two _____

Three _____

Four _____

Five _____

Six _____

3. What are the most important issues for you in the upcoming elections?

_____

_____

_____

_____

4. What is your gender?

___ Male

___ Female

5. Please choose the category below that includes your age.

___ 17 or younger

___ 18-20

___ 21-29

___ 30-39

___ 40-49

___ 50-59

___ 60 or older

6. What is the highest level of school you have completed or the highest degree you have received?

____ Less than high school degree

____ High school degree or equivalent (e.g., GED)

____ Some college but no degree

____ Associate degree

____ Bachelor degree

____ Graduate degree

List of Treatment Media Used (Posted on Facebook or Sent Via Facebook Message)

High Exposure Group

http://www.thedailyshow.com/watch/wed-november-30-2011/indecision-2011---let-my-people-vote

http://palestinianpundit.blogspot.com/2010/03/egypt-population-growth-overtakes.html

http://213.158.162.45/~egyptian/index.php?action=news&id=21381&title=Opinion:%20The%20writing%20is%20on%20the%20wall

http://www.thenational.ae/news/worldwide/middle-east/from-a-toothbrush-to-a-rocket-ship-symbols-guide-egyptian-voters

http://www.youtube.com/watch?v=T6gIce0Lzxk

http://www.guardian.co.uk/world/gallery/2011/nov/27/egypt-election-symbols-in-pictures#/?picture=382437610&index=7

http://ipsnews.net/news.asp?idnews=50641

http://www.youtube.com/watch?v=ciafLbVMUB0

http://www.rckarnak.org/?page_id=98

http://www.youtube.com/watch?v=1XSsULOxPUk

Medium Exposure Group

http://www.youtube.com/watch?v=3f_6EEWbOW8

http://www.stanford.edu/group/ccr/blog/2009/04/water_pollution.html

http://213.158.162.45/~egyptian/index.php?action=news&id=21381&title=Opinion:%20The%20writing%20is%20on%20the%20wall

http://online.wsj.com/article/SB10001424052970203833104577072371752130902.html

http://www.youtube.com/watch?v=T6gIce0Lzxk

http://www.guardian.co.uk/world/gallery/2011/nov/27/egypt-election-symbols-in-pictures#/?picture=382437610&index=7

http://www.arabist.net/blog/2011/12/3/charts-galore-round-one-of-egypts-elections.html

http://www.youtube.com/watch?v=ciafLbVMUB0

http://english.ahram.org.eg/NewsContent/3/12/27528/Business/Economy/Egypt-is-threatened-with-removal-from-global-touri.aspx

http://www.youtube.com/watch?v=1XSsULOxPUk

No Exposure Group

http://www.youtube.com/watch?v=3f_6EEWbOW8

http://www.stanford.edu/group/ccr/blog/2009/04/water_pollution.html

http://www.abc.net.au/local/stories/2011/11/29/3379319.htm?site=sydney

http://online.wsj.com/article/SB10001424052970203833104577072371752130902.html

http://www.youtube.com/watch?v=o3XBpSb23HU

http://theredphoenixapl.org/2011/11/28/political-cartoon-egypts-revolution-versus-military-rule/

http://www.arabist.net/blog/2011/12/3/charts-galore-round-one-of-egypts-elections.html

http://www.aljazeera.com/video/middleeast/2011/06/2011621172857174355.html\

http://english.ahram.org.eg/NewsContent/3/12/27528/Business/Economy/Egypt-is-threatened-with-removal-from-global-touri.aspx

http://www.youtube.com/watch?v=qi9I7276SzA

Pretest Questionnaire

Survey 1

Name: _____

Please fill out the following questions completely and honestly. All answers will be kept confidential. Thank you for your participation!

---

1) Shown below is a list of issues that have affected Egypt recently. How important do you think each is?

	Extremely Important	Very Important	Important	Not So Important	Not Important At All
Religious Intolerance	_____	_____	_____	_____	_____
Corruption	_____	_____	_____	_____	_____
Ignorance/Illiteracy	_____	_____	_____	_____	_____
Security	_____	_____	_____	_____	_____
Poverty/Social Inequality	_____	_____	_____	_____	_____
The Economy	_____	_____	_____	_____	_____
Military Rule	_____	_____	_____	_____	_____

---

2) How often do you get your news from these sources?

	Never	Sometimes	Often	Always
Newspapers	_____	_____	_____	_____
Television	_____	_____	_____	_____
The Internet	_____	_____	_____	_____

Other (please specify media type and how often you use it):

_____

---

3) Which political party do you support the most?

_____

_____

_____

_____

4) How much do you think that candidates in the election should worry about these problems?

	A Lot	Some	A Little	Not At All
The Economy	_____	_____	_____	_____
Military Rule	_____	_____	_____	_____
Religious Intolerance	_____	_____	_____	_____
Poverty / Social Inequality	_____	_____	_____	_____
Security	_____	_____	_____	_____
Ignorance / Illiteracy	_____	_____	_____	_____
Corruption	_____	_____	_____	_____

---

5) Are you an active Facebook user (check the site at least once a day)?

____ Yes

____ No

____ N/A (Not a Facebook user)

---

6) How often do you talk with others about these problems?

	Almost Every Day	Frequently	Sometimes	Rarely	Not At All
Military Rule	____	____	____	____	____
The Economy	____	____	____	____	____

Corruption	____	____	____	____	____
Religious Intolerance	____	____	____	____	____
Poverty / Social Inequality	____	____	____	____	____
Security	____	____	____	____	____
Ignorance / Illiteracy	____	____	____	____	____

---

7) What is your age?

___ Under 18

___ 18-25

___ 26-35

___ 36-45

___ Over 45

---

8) What is your gender?

___ Male

___ Female

---

9) What is your religious affiliation?

___ Muslim

___ Christian

___ Other (please specify): _____

10) What is the highest level of education you have completed?

___ Less than High School

___ High School

___ Some College (if currently enrolled, please circle the level you are in:

Freshman, Sophomore, Junior, Senior)

___ Bachelor's Degree

___ Master's Degree

___ Doctorate

Posttest Questionnaire

Survey 2

Name: _____

Please fill out the following questions completely and honestly. All answers will be kept confidential. Thank you for your participation!

---

1) Have you voted or do you intend to vote in the current parliamentary elections?

____ Yes

____ No

____ Undecided

---

2) Shown below is a list of issues that have affected Egypt recently. How important do you think each is?

	Extremely Important	Very Important	Important	Not So Important	Not Important At All
Religious Intolerance	_____	_____	_____	_____	_____
Corruption	_____	_____	_____	_____	_____
Ignorance/Illiteracy	_____	_____	_____	_____	_____
Security	_____	_____	_____	_____	_____
Poverty/Social Inequality	_____	_____	_____	_____	_____
The Economy	_____	_____	_____	_____	_____
Military Rule	_____	_____	_____	_____	_____

---

3) Which website would you check first during an emergency?

____ Facebook
____ Twitter
____Youtube
____ Al Masry Al Youm
____ Other (please specify which site):_____

4) How much do you think that candidates in the election should worry about these problems?

	A Lot	Some	A Little	Not At All
The Economy	_____	_____	_____	_____
Military Rule	_____	_____	_____	_____
Religious Intolerance	_____	_____	_____	_____
Poverty / Social Inequality	_____	_____	_____	_____
Security	_____	_____	_____	_____
Ignorance / Illiteracy	_____	_____	_____	_____
Corruption	_____	_____	_____	_____

5) How often do you talk with others about these problems?

	Almost Every Day	Frequently	Sometimes	Rarely	Not At All
Military Rule	____	____	____	____	____
The Economy	____	____	____	____	____
Corruption	____	____	____	____	____
Religious Intolerance	____	____	____	____	____
Poverty / Social Inequality	____	____	____	____	____
Security	____	____	____	____	____
Ignorance / Illiteracy	____	____	____	____	____

6) Please rank the following issues facing Egypt in importance from 1 to 7, with 1 being most important and 7 being least important:

___ Religious Intolerance

___ Corruption

___ Ignorance / Illiteracy

___ Security

___ Poverty / Social Inequality

___ The Economy

___ Military Rule

Appendix B

			Score			Total
			Important	Very Important	Extremely Important	
Class	Freshman	Count	1	1	2	4
		% within Class	25.0%	25.0%	50.0%	100.0%
		% within Score	33.3%	50.0%	16.7%	23.5%
		% of Total	5.9%	5.9%	11.8%	23.5%
	Sophomore	Count	2	0	0	2
		% within Class	100.0%	0.0%	0.0%	100.0%
		% within Score	66.7%	0.0%	0.0%	11.8%
		% of Total	11.8%	0.0%	0.0%	11.8%
	Junior	Count	0	1	5	6
		% within Class	0.0%	16.7%	83.3%	100.0%
		% within Score	0.0%	50.0%	41.7%	35.3%
		% of Total	0.0%	5.9%	29.4%	35.3%
	Senior	Count	0	0	4	4
		% within Class	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	33.3%	23.5%
		% of Total	0.0%	0.0%	23.5%	23.5%
	Graduate	Count	0	0	1	1
		% within Class	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	8.3%	5.9%
		% of Total	0.0%	0.0%	5.9%	5.9%
Total		Count	3	2	12	17
		% within Class	17.6%	11.8%	70.6%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	17.6%	11.8%	70.6%	100.0%

Table 1: High Exposure Group Question 2 Responses By Education Level

			Score		Total
			Very Important	Extremely Important	
Class	Freshman	Count	1	1	2
		% within Class	50.0%	50.0%	100.0%
		% within Score	50.0%	7.7%	13.3%
		% of Total	6.7%	6.7%	13.3%
	Sophomore	Count	0	3	3
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	23.1%	20.0%
		% of Total	0.0%	20.0%	20.0%
	Junior	Count	0	3	3
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	23.1%	20.0%
		% of Total	0.0%	20.0%	20.0%
	Senior	Count	1	5	6
		% within Class	16.7%	83.3%	100.0%
		% within Score	50.0%	38.5%	40.0%
		% of Total	6.7%	33.3%	40.0%
	Graduate	Count	0	1	1
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	7.7%	6.7%
		% of Total	0.0%	6.7%	6.7%
Total		Count	2	13	15
		% within Class	13.3%	86.7%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	13.3%	86.7%	100.0%

Table 2: Medium Exposure Group Question 2 Responses By Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.462[a]	4	.484
N of Valid Cases	15		

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .13.

Table 3: Chi-Square Analysis of Medium Exposure Group Question 2 According to Education Level

			Score		Total
			Important	Extremely Important	
Class	Freshman	Count	0	1	1
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	10.0%	8.3%
		% of Total	0.0%	8.3%	8.3%
	Sophomore	Count	0	2	2
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	20.0%	16.7%
		% of Total	0.0%	16.7%	16.7%
	Junior	Count	0	4	4
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	40.0%	33.3%
		% of Total	0.0%	33.3%	33.3%
	Senior	Count	2	3	5
		% within Class	40.0%	60.0%	100.0%
		% within Score	100.0%	30.0%	41.7%
		% of Total	16.7%	25.0%	41.7%
Total		Count	2	10	12
		% within Class	16.7%	83.3%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	16.7%	83.3%	100.0%

Table 4: No Exposure Group Question 2 Responses By Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.360[a]	3	.339
N of Valid Cases	12		

a. 8 cells (100.0%) have expected count less than 5. The minimum expected count is .17.

Table 5: Chi-Square Analysis of No Exposure Group Question 2 According to Education Level

			Score			Total
			Important	Very Important	Extremely Important	
Class	Freshman	Count	0	2	0	2
		% within Class	0.0%	100.0%	0.0%	100.0%
		% within Score	0.0%	66.7%	0.0%	18.2%
		% of Total	0.0%	18.2%	0.0%	18.2%
	Sophomore	Count	2	0	1	3
		% within Class	66.7%	0.0%	33.3%	100.0%
		% within Score	50.0%	0.0%	25.0%	27.3%
		% of Total	18.2%	0.0%	9.1%	27.3%
	Senior	Count	1	1	3	5
		% within Class	20.0%	20.0%	60.0%	100.0%
		% within Score	25.0%	33.3%	75.0%	45.5%
		% of Total	9.1%	9.1%	27.3%	45.5%
	Graduate	Count	1	0	0	1
		% within Class	100.0%	0.0%	0.0%	100.0%
		% within Score	25.0%	0.0%	0.0%	9.1%
		% of Total	9.1%	0.0%	0.0%	9.1%
Total		Count	4	3	4	11
		% within Class	36.4%	27.3%	36.4%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	36.4%	27.3%	36.4%	100.0%

Table 6: No-Facebook Control Group Question 2 Responses By Education Level

			Score			Total
			Worry A Little	Worry Some	Worry A Lot	
Gender	Freshman	Count	0	1	3	4
		% within Gender	0.0%	25.0%	75.0%	100.0%
		% within Score	0.0%	25.0%	25.0%	23.5%
		% of Total	0.0%	5.9%	17.6%	23.5%
	Sophomore	Count	0	2	0	2
		% within Gender	0.0%	100.0%	0.0%	100.0%
		% within Score	0.0%	50.0%	0.0%	11.8%
		% of Total	0.0%	11.8%	0.0%	11.8%
	Junior	Count	1	1	4	6
		% within Gender	16.7%	16.7%	66.7%	100.0%
		% within Score	100.0%	25.0%	33.3%	35.3%
		% of Total	5.9%	5.9%	23.5%	35.3%
	Senior	Count	0	0	4	4
		% within Gender	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	33.3%	23.5%
		% of Total	0.0%	0.0%	23.5%	23.5%
	Graduate	Count	0	0	1	1
		% within Gender	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	8.3%	5.9%
		% of Total	0.0%	0.0%	5.9%	5.9%
Total		Count	1	4	12	17
		% within Gender	5.9%	23.5%	70.6%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	23.5%	70.6%	100.0%

Table 7: High Exposure Group Question 4 Responses By Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.153[a]	8	.254
N of Valid Cases	17		

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Table 8: Chi-Square Analysis of High Exposure Group Question 4 According to Education Level

			Score			Total
			Worry A Little	Worry Some	Worry A Lot	
Class	Freshman	Count	0	1	1	2
		% within Class	0.0%	50.0%	50.0%	100.0%
		% within Score	0.0%	50.0%	8.3%	13.3%
		% of Total	0.0%	6.7%	6.7%	13.3%
	Sophomore	Count	0	0	3	3
		% within Class	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	25.0%	20.0%
		% of Total	0.0%	0.0%	20.0%	20.0%
	Junior	Count	0	0	3	3
		% within Class	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	25.0%	20.0%
		% of Total	0.0%	0.0%	20.0%	20.0%
	Senior	Count	1	1	4	6
		% within Class	16.7%	16.7%	66.7%	100.0%
		% within Score	100.0%	50.0%	33.3%	40.0%
		% of Total	6.7%	6.7%	26.7%	40.0%
	Graduate	Count	0	0	1	1
		% within Class	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	8.3%	6.7%
		% of Total	0.0%	0.0%	6.7%	6.7%
Total		Count	1	2	12	15
		% within Class	6.7%	13.3%	80.0%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	6.7%	13.3%	80.0%	100.0%

Table 9: Medium Exposure Group Question 4 Responses By Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.208[a]	8	.735
N of Valid Cases	15		

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .07.

Table 10: Chi-Square Analysis of Medium Exposure Group Question 4 According to Education Level

			Score		Total
			Worry Some	Worry A Lot	
Class	Freshman	Count	0	1	1
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	10.0%	8.3%
		% of Total	0.0%	8.3%	8.3%
	Sophomore	Count	0	2	2
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	20.0%	16.7%
		% of Total	0.0%	16.7%	16.7%
	Junior	Count	0	4	4
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	40.0%	33.3%
		% of Total	0.0%	33.3%	33.3%
	Senior	Count	2	3	5
		% within Class	40.0%	60.0%	100.0%
		% within Score	100.0%	30.0%	41.7%
		% of Total	16.7%	25.0%	41.7%
Total		Count	2	10	12
		% within Class	16.7%	83.3%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	16.7%	83.3%	100.0%

Table 11: No Exposure Group Responses to Question 4 By Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.360[a]	3	.339
N of Valid Cases	12		

a. 8 cells (100.0%) have expected count less than 5. The minimum expected count is .17.

Table 12: Chi-Square Analysis of No Exposure Group Question 4 According to Education Level

			Score		Total
			Worry Some	Worry A Lot	
Class	Freshman	Count	0	2	2
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	25.0%	18.2%
		% of Total	0.0%	18.2%	18.2%
	Sophomore	Count	2	1	3
		% within Class	66.7%	33.3%	100.0%
		% within Score	66.7%	12.5%	27.3%
		% of Total	18.2%	9.1%	27.3%
	Senior	Count	0	5	5
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	62.5%	45.5%
		% of Total	0.0%	45.5%	45.5%
	Graduate	Count	1	0	1
		% within Class	100.0%	0.0%	100.0%
		% within Score	33.3%	0.0%	9.1%
		% of Total	9.1%	0.0%	9.1%
Total		Count	3	8	11
		% within Class	27.3%	72.7%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	27.3%	72.7%	100.0%

Table 13: No Exposure Group Question 4 Responses By Education Level

			Score		Total
			Worry Some	Worry A Lot	
Class	Freshman	Count	0	2	2
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	25.0%	18.2%
		% of Total	0.0%	18.2%	18.2%
	Sophomore	Count	2	1	3
		% within Class	66.7%	33.3%	100.0%
		% within Score	66.7%	12.5%	27.3%
		% of Total	18.2%	9.1%	27.3%
	Senior	Count	0	5	5
		% within Class	0.0%	100.0%	100.0%
		% within Score	0.0%	62.5%	45.5%
		% of Total	0.0%	45.5%	45.5%
	Graduate	Count	1	0	1
		% within Class	100.0%	0.0%	100.0%
		% within Score	33.3%	0.0%	9.1%
		% of Total	9.1%	0.0%	9.1%
Total		Count	3	8	11
		% within Class	27.3%	72.7%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	27.3%	72.7%	100.0%

Table 14: No-Facebook Control Group Question 4 Responses By Education Level

			Score					Total
			Talk Not At All	Talk Rarely	Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Gender	Freshman	Count	0	1	1	2	0	4
		% within Gender	0.0%	25.0%	25.0%	50.0%	0.0%	100.0%
		% within Score	0.0%	100.0%	25.0%	22.2%	0.0%	23.5%
		% of Total	0.0%	5.9%	5.9%	11.8%	0.0%	23.5%
	Sophomore	Count	0	0	1	1	0	2
		% within Gender	0.0%	0.0%	50.0%	50.0%	0.0%	100.0%
		% within Score	0.0%	0.0%	25.0%	11.1%	0.0%	11.8%
		% of Total	0.0%	0.0%	5.9%	5.9%	0.0%	11.8%
	Junior	Count	0	0	1	3	2	6
		% within Gender	0.0%	0.0%	16.7%	50.0%	33.3%	100.0%
		% within Score	0.0%	0.0%	25.0%	33.3%	100.0%	35.3%
		% of Total	0.0%	0.0%	5.9%	17.6%	11.8%	35.3%
	Senior	Count	1	0	0	3	0	4
		% within Gender	25.0%	0.0%	0.0%	75.0%	0.0%	100.0%
		% within Score	100.0%	0.0%	0.0%	33.3%	0.0%	23.5%
		% of Total	5.9%	0.0%	0.0%	17.6%	0.0%	23.5%
	Graduate	Count	0	0	1	0	0	1
		% within Gender	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
		% within Score	0.0%	0.0%	25.0%	0.0%	0.0%	5.9%
		% of Total	0.0%	0.0%	5.9%	0.0%	0.0%	5.9%
Total		Count	1	1	4	9	2	17
		% within Gender	5.9%	5.9%	23.5%	52.9%	11.8%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	5.9%	23.5%	52.9%	11.8%	100.0%

Table 15: High Exposure Group Question 5 Responses By Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.229[a]	16	.508
N of Valid Cases	17		

a. 25 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Table 16: Chi-Square Analysis of High Exposure Group Question 5 According to Education Level

			Score			Total
			Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Class	Freshman	Count	1	0	1	2
		% within Class	50.0%	0.0%	50.0%	100.0%
		% within Score	33.3%	0.0%	9.1%	13.3%
		% of Total	6.7%	0.0%	6.7%	13.3%
	Sophomore	Count	1	0	2	3
		% within Class	33.3%	0.0%	66.7%	100.0%
		% within Score	33.3%	0.0%	18.2%	20.0%
		% of Total	6.7%	0.0%	13.3%	20.0%
	Junior	Count	0	1	2	3
		% within Class	0.0%	33.3%	66.7%	100.0%
		% within Score	0.0%	100.0%	18.2%	20.0%
		% of Total	0.0%	6.7%	13.3%	20.0%
	Senior	Count	1	0	5	6
		% within Class	16.7%	0.0%	83.3%	100.0%
		% within Score	33.3%	0.0%	45.5%	40.0%
		% of Total	6.7%	0.0%	33.3%	40.0%
	Graduate	Count	0	0	1	1
		% within Class	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	9.1%	6.7%
		% of Total	0.0%	0.0%	6.7%	6.7%
Total		Count	3	1	11	15
		% within Class	20.0%	6.7%	73.3%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	20.0%	6.7%	73.3%	100.0%

Table 17: Medium Exposure Group Question 5 Responses By Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.364[a]	8	.607
N of Valid Cases	15		

a. 15 cells (100.0%) have expected count less than 5. The minimum expected count is .07.

Table 18: Chi-Square Analysis of Medium Exposure Group Question 5 According to Education Level

			Score			Total
			Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Class	Freshman	Count	0	0	1	1
		% within Class	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	14.3%	8.3%
		% of Total	0.0%	0.0%	8.3%	8.3%
	Sophomore	Count	0	1	1	2
		% within Class	0.0%	50.0%	50.0%	100.0%
		% within Score	0.0%	50.0%	14.3%	16.7%
		% of Total	0.0%	8.3%	8.3%	16.7%
	Junior	Count	0	1	3	4
		% within Class	0.0%	25.0%	75.0%	100.0%
		% within Score	0.0%	50.0%	42.9%	33.3%
		% of Total	0.0%	8.3%	25.0%	33.3%
	Senior	Count	3	0	2	5
		% within Class	60.0%	0.0%	40.0%	100.0%
		% within Score	100.0%	0.0%	28.6%	41.7%
		% of Total	25.0%	0.0%	16.7%	41.7%
Total		Count	3	2	7	12
		% within Class	25.0%	16.7%	58.3%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	25.0%	16.7%	58.3%	100.0%

Table 19: No Exposure Group Question 5 Responses By Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.500[a]	6	.277
N of Valid Cases	12		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .17.

Table 20: Chi-Square Analysis of No Exposure Group Question 5 According to Education Level

			Score				Total
			Talk Rarely	Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Class	Freshman	Count	1	0	0	1	2
		% within Class	50.0%	0.0%	0.0%	50.0%	100.0%
		% within Score	100.0%	0.0%	0.0%	25.0%	18.2%
		% of Total	9.1%	0.0%	0.0%	9.1%	18.2%
	Sophomore	Count	0	0	3	0	3
		% within Class	0.0%	0.0%	100.0%	0.0%	100.0%
		% within Score	0.0%	0.0%	75.0%	0.0%	27.3%
		% of Total	0.0%	0.0%	27.3%	0.0%	27.3%
	Senior	Count	0	1	1	3	5
		% within Class	0.0%	20.0%	20.0%	60.0%	100.0%
		% within Score	0.0%	50.0%	25.0%	75.0%	45.5%
		% of Total	0.0%	9.1%	9.1%	27.3%	45.5%
	Graduate	Count	0	1	0	0	1
		% within Class	0.0%	100.0%	0.0%	0.0%	100.0%
		% within Score	0.0%	50.0%	0.0%	0.0%	9.1%
		% of Total	0.0%	9.1%	0.0%	0.0%	9.1%
Total		Count	1	2	4	4	11
		% within Class	9.1%	18.2%	36.4%	36.4%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	9.1%	18.2%	36.4%	36.4%	100.0%

Table 21: No-Facebook Control Group Question 5 Responses By Education Level

			Index					Total
			9	10	12	13	14	
Class	Freshman	Count	1	1	0	2	0	4
		% within Class	25.0%	25.0%	0.0%	50.0%	0.0%	100.0%
		% within Index	50.0%	25.0%	0.0%	25.0%	0.0%	23.5%
		% of Total	5.9%	5.9%	0.0%	11.8%	0.0%	23.5%
	Sophomore	Count	1	1	0	0	0	2
		% within Class	50.0%	50.0%	0.0%	0.0%	0.0%	100.0%
		% within Index	50.0%	25.0%	0.0%	0.0%	0.0%	11.8%
		% of Total	5.9%	5.9%	0.0%	0.0%	0.0%	11.8%
	Junior	Count	0	1	1	3	1	6
		% within Class	0.0%	16.7%	16.7%	50.0%	16.7%	100.0%
		% within Index	0.0%	25.0%	50.0%	37.5%	100.0%	35.3%
		% of Total	0.0%	5.9%	5.9%	17.6%	5.9%	35.3%
	Senior	Count	0	1	0	3	0	4
		% within Class	0.0%	25.0%	0.0%	75.0%	0.0%	100.0%
		% within Index	0.0%	25.0%	0.0%	37.5%	0.0%	23.5%
		% of Total	0.0%	5.9%	0.0%	17.6%	0.0%	23.5%
	Graduate	Count	0	0	1	0	0	1
		% within Class	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
		% within Index	0.0%	0.0%	50.0%	0.0%	0.0%	5.9%
		% of Total	0.0%	0.0%	5.9%	0.0%	0.0%	5.9%
Total		Count	2	4	2	8	1	17
		% within Class	11.8%	23.5%	11.8%	47.1%	5.9%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	11.8%	23.5%	11.8%	47.1%	5.9%	100.0%

Table 22: High Exposure Group Index Scores By Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	17.177[a]	16	.374
N of Valid Cases	17		

a. 25 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Table 23: Chi-Square Analysis of High Exposure Group Index Scores According to Education Level

			Index				Total
			10	12	13	14	
Class	Freshman	Count	1	0	0	1	2
		% within Class	50.0%	0.0%	0.0%	50.0%	100.0%
		% within Index	50.0%	0.0%	0.0%	10.0%	13.3%
		% of Total	6.7%	0.0%	0.0%	6.7%	13.3%
	Sophomore	Count	0	1	0	2	3
		% within Class	0.0%	33.3%	0.0%	66.7%	100.0%
		% within Index	0.0%	50.0%	0.0%	20.0%	20.0%
		% of Total	0.0%	6.7%	0.0%	13.3%	20.0%
	Junior	Count	0	0	1	2	3
		% within Class	0.0%	0.0%	33.3%	66.7%	100.0%
		% within Index	0.0%	0.0%	100.0%	20.0%	20.0%
		% of Total	0.0%	0.0%	6.7%	13.3%	20.0%
	Senior	Count	1	1	0	4	6
		% within Class	16.7%	16.7%	0.0%	66.7%	100.0%
		% within Index	50.0%	50.0%	0.0%	40.0%	40.0%
		% of Total	6.7%	6.7%	0.0%	26.7%	40.0%
	Graduate	Count	0	0	0	1	1
		% within Class	0.0%	0.0%	0.0%	100.0%	100.0%
		% within Index	0.0%	0.0%	0.0%	10.0%	6.7%
		% of Total	0.0%	0.0%	0.0%	6.7%	6.7%
Total		Count	2	2	1	10	15
		% within Class	13.3%	13.3%	6.7%	66.7%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	13.3%	13.3%	6.7%	66.7%	100.0%

Table 24: Medium Exposure Group Index Scores By Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	9.000[a]	12	.703
N of Valid Cases	15		

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .07.

Table 25: Chi-Square Analysis of Medium Exposure Group Index Scores According to Education Level

			Index					Total
			9	11	12	13	14	
Class	Freshman	Count	0	0	0	0	1	1
		% within Class	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
		% within Index	0.0%	0.0%	0.0%	0.0%	25.0%	8.3%
		% of Total	0.0%	0.0%	0.0%	0.0%	8.3%	8.3%
	Sophomore	Count	0	0	1	1	0	2
		% within Class	0.0%	0.0%	50.0%	50.0%	0.0%	100.0%
		% within Index	0.0%	0.0%	25.0%	50.0%	0.0%	16.7%
		% of Total	0.0%	0.0%	8.3%	8.3%	0.0%	16.7%
	Junior	Count	0	0	0	1	3	4
		% within Class	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%
		% within Index	0.0%	0.0%	0.0%	50.0%	75.0%	33.3%
		% of Total	0.0%	0.0%	0.0%	8.3%	25.0%	33.3%
	Senior	Count	1	1	3	0	0	5
		% within Class	20.0%	20.0%	60.0%	0.0%	0.0%	100.0%
		% within Index	100.0%	100.0%	75.0%	0.0%	0.0%	41.7%
		% of Total	8.3%	8.3%	25.0%	0.0%	0.0%	41.7%
Total		Count	1	1	4	2	4	12
		% within Class	8.3%	8.3%	33.3%	16.7%	33.3%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	8.3%	8.3%	33.3%	16.7%	33.3%	100.0%

Table 26: No Exposure Group Index Scores By Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.950[a]	12	.304
N of Valid Cases	12		

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .08.

Table 27: Chi-Square Analysis of No Exposure Group Index Scores According to Education Level

			Index						Total
			9	10	11	12	13	14	
Class	Freshman	Count	0	1	0	0	1	0	2
		% within Class	0.0%	50.0%	0.0%	0.0%	50.0%	0.0%	100.0%
		% within Index	0.0%	33.3%	0.0%	0.0%	33.3%	0.0%	18.2%
		% of Total	0.0%	9.1%	0.0%	0.0%	9.1%	0.0%	18.2%
	Sophomore	Count	0	2	0	0	1	0	3
		% within Class	0.0%	66.7%	0.0%	0.0%	33.3%	0.0%	100.0%
		% within Index	0.0%	66.7%	0.0%	0.0%	33.3%	0.0%	27.3%
		% of Total	0.0%	18.2%	0.0%	0.0%	9.1%	0.0%	27.3%
	Senior	Count	0	0	1	1	1	2	5
		% within Class	0.0%	0.0%	20.0%	20.0%	20.0%	40.0%	100.0%
		% within Index	0.0%	0.0%	100.0%	100.0%	33.3%	100.0%	45.5%
		% of Total	0.0%	0.0%	9.1%	9.1%	9.1%	18.2%	45.5%
	Graduate	Count	1	0	0	0	0	0	1
		% within Class	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Index	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%
		% of Total	9.1%	0.0%	0.0%	0.0%	0.0%	0.0%	9.1%
Total		Count	1	3	1	1	3	2	11
		% within Class	9.1%	27.3%	9.1%	9.1%	27.3%	18.2%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	9.1%	27.3%	9.1%	9.1%	27.3%	18.2%	100.0%

Table 28: No-Facebook Control Group Index Scores By Education Level

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.311[a]	15	.200
N of Valid Cases	11		

a. 24 cells (100.0%) have expected count less than 5. The minimum expected count is .09.

Table 29: Chi-Square Analysis of No-Facebook Control Group Index Scores According to Education Level

			Rating					Total
			1	3	4	5	7	
Class	Freshman	Count	0	1	2	1	0	4
		% within Class	0.0%	25.0%	50.0%	25.0%	0.0%	100.0%
		% within Rating	0.0%	33.3%	40.0%	25.0%	0.0%	25.0%
		% of Total	0.0%	6.2%	12.5%	6.2%	0.0%	25.0%
	Sophomore	Count	0	0	0	1	1	2
		% within Class	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
		% within Rating	0.0%	0.0%	0.0%	25.0%	33.3%	12.5%
		% of Total	0.0%	0.0%	0.0%	6.2%	6.2%	12.5%
	Junior	Count	1	1	0	2	1	5
		% within Class	20.0%	20.0%	0.0%	40.0%	20.0%	100.0%
		% within Rating	100.0%	33.3%	0.0%	50.0%	33.3%	31.2%
		% of Total	6.2%	6.2%	0.0%	12.5%	6.2%	31.2%
	Senior	Count	0	1	3	0	0	4
		% within Class	0.0%	25.0%	75.0%	0.0%	0.0%	100.0%
		% within Rating	0.0%	33.3%	60.0%	0.0%	0.0%	25.0%
		% of Total	0.0%	6.2%	18.8%	0.0%	0.0%	25.0%
	Graduate	Count	0	0	0	0	1	1
		% within Class	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
		% within Rating	0.0%	0.0%	0.0%	0.0%	33.3%	6.2%
		% of Total	0.0%	0.0%	0.0%	0.0%	6.2%	6.2%
Total		Count	1	3	5	4	3	16
		% within Class	6.2%	18.8%	31.2%	25.0%	18.8%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	6.2%	18.8%	31.2%	25.0%	18.8%	100.0%

Table 30: High Exposure Group Rating Scores By Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.600[a]	16	.412
N of Valid Cases	16		

a. 25 cells (100.0%) have expected count less than 5. The minimum expected count is .06.

Table 31: Chi-Square Analysis of High Exposure Group Rating Score According to Education Level

			Score					Total
			2	3	4	5	6	
Class	Freshman	Count	0	0	0	2	0	2
		% within Class	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
		% within Score	0.0%	0.0%	0.0%	66.7%	0.0%	15.4%
		% of Total	0.0%	0.0%	0.0%	15.4%	0.0%	15.4%
	Sophomore	Count	1	0	1	0	1	3
		% within Class	33.3%	0.0%	33.3%	0.0%	33.3%	100.0%
		% within Score	33.3%	0.0%	25.0%	0.0%	50.0%	23.1%
		% of Total	7.7%	0.0%	7.7%	0.0%	7.7%	23.1%
	Junior	Count	0	0	1	0	1	2
		% within Class	0.0%	0.0%	50.0%	0.0%	50.0%	100.0%
		% within Score	0.0%	0.0%	25.0%	0.0%	50.0%	15.4%
		% of Total	0.0%	0.0%	7.7%	0.0%	7.7%	15.4%
	Senior	Count	2	1	1	1	0	5
		% within Class	40.0%	20.0%	20.0%	20.0%	0.0%	100.0%
		% within Score	66.7%	100.0%	25.0%	33.3%	0.0%	38.5%
		% of Total	15.4%	7.7%	7.7%	7.7%	0.0%	38.5%
	Graduate	Count	0	0	1	0	0	1
		% within Class	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
		% within Score	0.0%	0.0%	25.0%	0.0%	0.0%	7.7%
		% of Total	0.0%	0.0%	7.7%	0.0%	0.0%	7.7%
Total		Count	3	1	4	3	2	13
		% within Class	23.1%	7.7%	30.8%	23.1%	15.4%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	23.1%	7.7%	30.8%	23.1%	15.4%	100.0%

Table 32: Medium Exposure Group Rating Scores By Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.069[a]	16	.448
N of Valid Cases	13		

a. 25 cells (100.0%) have expected count less than 5. The minimum expected count is .08.

Table 33: Chi-Square Analysis of Medium Exposure Group Rating Score According to Education Level

			Score				Total
			1	2	3	5	
Class	Freshman	Count	0	1	0	0	1
		% within Class	0.0%	100.0%	0.0%	0.0%	100.0%
		% within Score	0.0%	100.0%	0.0%	0.0%	11.1%
		% of Total	0.0%	11.1%	0.0%	0.0%	11.1%
	Junior	Count	2	0	1	1	4
		% within Class	50.0%	0.0%	25.0%	25.0%	100.0%
		% within Score	66.7%	0.0%	50.0%	33.3%	44.4%
		% of Total	22.2%	0.0%	11.1%	11.1%	44.4%
	Senior	Count	1	0	1	2	4
		% within Class	25.0%	0.0%	25.0%	50.0%	100.0%
		% within Score	33.3%	0.0%	50.0%	66.7%	44.4%
		% of Total	11.1%	0.0%	11.1%	22.2%	44.4%
Total		Count	3	1	2	3	9
		% within Class	33.3%	11.1%	22.2%	33.3%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	33.3%	11.1%	22.2%	33.3%	100.0%

Table 34: No Exposure Group Rating Scores By Gender

			Rating					Total
			1	4	5	6	7	
Class	Freshman	Count	0	1	1	0	0	2
		% within Class	0.0%	50.0%	50.0%	0.0%	0.0%	100.0%
		% within Rating	0.0%	33.3%	25.0%	0.0%	0.0%	18.2%
		% of Total	0.0%	9.1%	9.1%	0.0%	0.0%	18.2%
	Sophomore	Count	0	1	1	1	0	3
		% within Class	0.0%	33.3%	33.3%	33.3%	0.0%	100.0%
		% within Rating	0.0%	33.3%	25.0%	100.0%	0.0%	27.3%
		% of Total	0.0%	9.1%	9.1%	9.1%	0.0%	27.3%
	Senior	Count	2	0	2	0	1	5
		% within Class	40.0%	0.0%	40.0%	0.0%	20.0%	100.0%
		% within Rating	100.0%	0.0%	50.0%	0.0%	100.0%	45.5%
		% of Total	18.2%	0.0%	18.2%	0.0%	9.1%	45.5%
	Graduate	Count	0	1	0	0	0	1
		% within Class	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
		% within Rating	0.0%	33.3%	0.0%	0.0%	0.0%	9.1%
		% of Total	0.0%	9.1%	0.0%	0.0%	0.0%	9.1%
Total		Count	2	3	4	1	1	11
		% within Class	18.2%	27.3%	36.4%	9.1%	9.1%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	18.2%	27.3%	36.4%	9.1%	9.1%	100.0%

Table 35: No-Facebook Control Group Rating Scores By Education Level

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.481[a]	12	.574
N of Valid Cases	11		

a. 20 cells (100.0%) have expected count less than 5. The minimum expected count is .09.

Table 36: Chi-Square Analysis of No-Facebook Control Group Rating Score According to Education Level

			Score			Total
			Important	Very Important	Extremely Important	
Gender	Male	Count	1	1	3	5
		% within Gender	20.0%	20.0%	60.0%	100.0%
		% within Score	33.3%	50.0%	21.4%	26.3%
		% of Total	5.3%	5.3%	15.8%	26.3%
	Female	Count	2	1	11	14
		% within Gender	14.3%	7.1%	78.6%	100.0%
		% within Score	66.7%	50.0%	78.6%	73.7%
		% of Total	10.5%	5.3%	57.9%	73.7%
Total		Count	3	2	14	19
		% within Gender	15.8%	10.5%	73.7%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	15.8%	10.5%	73.7%	100.0%

Table 37: High Exposure Group Question 2 Scores By Gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.827[a]	2	.661
N of Valid Cases	19		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .53.

Table 38: Chi-Square Analysis of High Exposure Group Question 2 According to Gender

			Score		Total
			Very Important	Extremely Important	
Gender	Male	Count	0	4	4
		% within Gender	0.0%	100.0%	100.0%
		% within Score	0.0%	26.7%	23.5%
		% of Total	0.0%	23.5%	23.5%
	Female	Count	2	11	13
		% within Gender	15.4%	84.6%	100.0%
		% within Score	100.0%	73.3%	76.5%
		% of Total	11.8%	64.7%	76.5%
Total		Count	2	15	17
		% within Gender	11.8%	88.2%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	11.8%	88.2%	100.0%

Table 39: Medium Exposure Group Question 2 Scores By Gender

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.697[a]	1	.404		
Fisher's Exact Test				1.000	.574
N of Valid Cases	17				

a. 3 cells (75.0%) have expected count less than 5. The minimum expected count is .47.

b. Computed only for a 2x2 table

Table 40: Chi-Square Analysis of Medium Exposure Group Question 2 According to Gender

			Score			Total
			Important	Very Important	Extremely Important	
Gender	Male	Count	2	0	3	5
		% within Gender	40.0%	0.0%	60.0%	100.0%
		% within Score	100.0%	0.0%	21.4%	27.8%
		% of Total	11.1%	0.0%	16.7%	27.8%
	Female	Count	0	2	11	13
		% within Gender	0.0%	15.4%	84.6%	100.0%
		% within Score	0.0%	100.0%	78.6%	72.2%
		% of Total	0.0%	11.1%	61.1%	72.2%
Total		Count	2	2	14	18
		% within Gender	11.1%	11.1%	77.8%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	11.1%	11.1%	77.8%	100.0%

Table 41: No Exposure Group Question 2 Scores By Gender

			Score			Total
			Important	Very Important	Extremely Important	
Gender	Male	Count	1	0	2	3
		% within Gender	33.3%	0.0%	66.7%	100.0%
		% within Score	20.0%	0.0%	25.0%	17.6%
		% of Total	5.9%	0.0%	11.8%	17.6%
	Female	Count	4	4	6	14
		% within Gender	28.6%	28.6%	42.9%	100.0%
		% within Score	80.0%	100.0%	75.0%	82.4%
		% of Total	23.5%	23.5%	35.3%	82.4%
Total		Count	5	4	8	17
		% within Gender	29.4%	23.5%	47.1%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	29.4%	23.5%	47.1%	100.0%

Table 42: No-Facebook Control Group Responses to Question 2 By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.174[a]	2	.556
N of Valid Cases	17		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .71.

Table 43: Chi-Square Analysis of No-Facebook Control Group Question 2 According to Gender

			Score			Total
			Worry A Little	Worry Some	Worry A Lot	
Gender	Male	Count	1	2	2	5
		% within Gender	20.0%	40.0%	40.0%	100.0%
		% within Score	100.0%	50.0%	14.3%	26.3%
		% of Total	5.3%	10.5%	10.5%	26.3%
	Female	Count	0	2	12	14
		% within Gender	0.0%	14.3%	85.7%	100.0%
		% within Score	0.0%	50.0%	85.7%	73.7%
		% of Total	0.0%	10.5%	63.2%	73.7%
Total		Count	1	4	14	19
		% within Gender	5.3%	21.1%	73.7%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	5.3%	21.1%	73.7%	100.0%

Table 44: High Exposure Group Question 4 Responses By Gender

			Score			Total
			Worry A Little	Worry Some	Worry A Lot	
Gender	Male	Count	1	0	3	4
		% within Gender	25.0%	0.0%	75.0%	100.0%
		% within Score	100.0%	0.0%	21.4%	23.5%
		% of Total	5.9%	0.0%	17.6%	23.5%
	Female	Count	0	2	11	13
		% within Gender	0.0%	15.4%	84.6%	100.0%
		% within Score	0.0%	100.0%	78.6%	76.5%
		% of Total	0.0%	11.8%	64.7%	76.5%
Total		Count	1	2	14	17
		% within Gender	5.9%	11.8%	82.4%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	11.8%	82.4%	100.0%

Table 45: Medium Exposure Group Question 4 Responses By Gender

			Score		Total
			Worry Some	Worry A Lot	
Gender	Male	Count	2	3	5
		% within Gender	40.0%	60.0%	100.0%
		% within Score	66.7%	20.0%	27.8%
		% of Total	11.1%	16.7%	27.8%
	Female	Count	1	12	13
		% within Gender	7.7%	92.3%	100.0%
		% within Score	33.3%	80.0%	72.2%
		% of Total	5.6%	66.7%	72.2%
Total		Count	3	15	18
		% within Gender	16.7%	83.3%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	16.7%	83.3%	100.0%

Table 46: No Exposure Group Responses to Question 4 By Gender

			Score		Total
			Worry Some	Worry A Lot	
Gender	Male	Count	0	3	3
		% within Gender	0.0%	100.0%	100.0%
		% within Score	0.0%	21.4%	17.6%
		% of Total	0.0%	17.6%	17.6%
	Female	Count	3	11	14
		% within Gender	21.4%	78.6%	100.0%
		% within Score	100.0%	78.6%	82.4%
		% of Total	17.6%	64.7%	82.4%
Total		Count	3	14	17
		% within Gender	17.6%	82.4%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	17.6%	82.4%	100.0%

Table 47: No-Facebook Control Group Question 4 Responses By Gender

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.781[a]	1	.377		
Fisher's Exact Test				1.000	.535
N of Valid Cases	17				

a. 3 cells (75.0%) have expected count less than 5. The minimum expected count is .53.

b. Computed only for a 2x2 table

Table 48: Chi-Square Analysis of No-Facebook Group Question 4 According to Gender

			Score					Total
			Talk Not At All	Talk Rarely	Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Gender	Male	Count	1	0	3	0	1	5
		% within Gender	20.0%	0.0%	60.0%	0.0%	20.0%	100.0%
		% within Score	100.0%	0.0%	60.0%	0.0%	50.0%	26.3%
		% of Total	5.3%	0.0%	15.8%	0.0%	5.3%	26.3%
	Female	Count	0	1	2	10	1	14
		% within Gender	0.0%	7.1%	14.3%	71.4%	7.1%	100.0%
		% within Score	0.0%	100.0%	40.0%	100.0%	50.0%	73.7%
		% of Total	0.0%	5.3%	10.5%	52.6%	5.3%	73.7%
Total		Count	1	1	5	10	2	19
		% within Gender	5.3%	5.3%	26.3%	52.6%	10.5%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.3%	5.3%	26.3%	52.6%	10.5%	100.0%

Table 49: High Exposure Group Question 5 Responses By Gender

			Score			Total
			Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Gender	Male	Count	0	0	2	2
		% within Gender	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	20.0%	14.3%
		% of Total	0.0%	0.0%	14.3%	14.3%
	Female	Count	2	2	8	12
		% within Gender	16.7%	16.7%	66.7%	100.0%
		% within Score	100.0%	100.0%	80.0%	85.7%
		% of Total	14.3%	14.3%	57.1%	85.7%
Total		Count	2	2	10	14
		% within Gender	14.3%	14.3%	71.4%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	14.3%	14.3%	71.4%	100.0%

Table 50: Medium Exposure Group Question 5 Responses By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.933[a]	2	.627
N of Valid Cases	14		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .29.

Table 51: Chi-Square Analysis of Medium Exposure Group Question 5 According to Gender

			Score			Total
			Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Gender	Male	Count	2	0	3	5
		% within Gender	40.0%	0.0%	60.0%	100.0%
		% within Score	40.0%	0.0%	30.0%	29.4%
		% of Total	11.8%	0.0%	17.6%	29.4%
	Female	Count	3	2	7	12
		% within Gender	25.0%	16.7%	58.3%	100.0%
		% within Score	60.0%	100.0%	70.0%	70.6%
		% of Total	17.6%	11.8%	41.2%	70.6%
Total		Count	5	2	10	17
		% within Gender	29.4%	11.8%	58.8%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	29.4%	11.8%	58.8%	100.0%

Table 52: No Exposure Group Question 5 Responses By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.105[a]	2	.576
N of Valid Cases	17		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .59.

Table 53: Chi-Square Analysis of No Exposure Group Question 5 According to Gender

			Score				Total
			Talk Rarely	Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Gender	Male	Count	0	1	1	1	3
		% within Gender	0.0%	33.3%	33.3%	33.3%	100.0%
		% within Score	0.0%	20.0%	25.0%	14.3%	17.6%
		% of Total	0.0%	5.9%	5.9%	5.9%	17.6%
	Female	Count	1	4	3	6	14
		% within Gender	7.1%	28.6%	21.4%	42.9%	100.0%
		% within Score	100.0%	80.0%	75.0%	85.7%	82.4%
		% of Total	5.9%	23.5%	17.6%	35.3%	82.4%
Total		Count	1	5	4	7	17
		% within Gender	5.9%	29.4%	23.5%	41.2%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	29.4%	23.5%	41.2%	100.0%

Table 54: No-Facebook Control Group Question 5 Responses By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.437[a]	3	.933
N of Valid Cases	17		

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .18.

Table 55: Chi-Square Analysis of No-Facebook Control Group Question 5 According to Gender

			Index					Total
			9	10	12	13	14	
Gender	Male	Count	1	2	2	0	0	5
		% within Gender	20.0%	40.0%	40.0%	0.0%	0.0%	100.0%
		% within Index	50.0%	50.0%	66.7%	0.0%	0.0%	26.3%
		% of Total	5.3%	10.5%	10.5%	0.0%	0.0%	26.3%
	Female	Count	1	2	1	9	1	14
		% within Gender	7.1%	14.3%	7.1%	64.3%	7.1%	100.0%
		% within Index	50.0%	50.0%	33.3%	100.0%	100.0%	73.7%
		% of Total	5.3%	10.5%	5.3%	47.4%	5.3%	73.7%
Total		Count	2	4	3	9	1	19
		% within Gender	10.5%	21.1%	15.8%	47.4%	5.3%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	10.5%	21.1%	15.8%	47.4%	5.3%	100.0%

Table 56: High Exposure Index Scores By Gender

			Index				Total
			10	12	13	14	
Gender	Male	Count	0	1	0	3	4
		% within Gender	0.0%	25.0%	0.0%	75.0%	100.0%
		% within Index	0.0%	50.0%	0.0%	27.3%	23.5%
		% of Total	0.0%	5.9%	0.0%	17.6%	23.5%
	Female	Count	2	1	2	8	13
		% within Gender	15.4%	7.7%	15.4%	61.5%	100.0%
		% within Index	100.0%	50.0%	100.0%	72.7%	76.5%
		% of Total	11.8%	5.9%	11.8%	47.1%	76.5%
Total		Count	2	2	2	11	17
		% within Gender	11.8%	11.8%	11.8%	64.7%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	11.8%	11.8%	11.8%	64.7%	100.0%

Table 57: Medium Exposure Group Index Scores By Gender

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.095[a]	3	.553
N of Valid Cases	17		

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .47.

Table 58: Chi-Square Analysis of Medium Exposure Group Index Scores According to Gender

			Index						Total
			9	10	11	12	13	14	
Gender	Male	Count	1	0	1	1	0	2	5
		% within Gender	20.0%	0.0%	20.0%	20.0%	0.0%	40.0%	100.0%
		% within Index	100.0%	0.0%	100.0%	25.0%	0.0%	28.6%	29.4%
		% of Total	5.9%	0.0%	5.9%	5.9%	0.0%	11.8%	29.4%
	Female	Count	0	1	0	3	3	5	12
		% within Gender	0.0%	8.3%	0.0%	25.0%	25.0%	41.7%	100.0%
		% within Index	0.0%	100.0%	0.0%	75.0%	100.0%	71.4%	70.6%
		% of Total	0.0%	5.9%	0.0%	17.6%	17.6%	29.4%	70.6%
Total		Count	1	1	1	4	3	7	17
		% within Gender	5.9%	5.9%	5.9%	23.5%	17.6%	41.2%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	5.9%	5.9%	23.5%	17.6%	41.2%	100.0%

Table 59: No Exposure Group Index Scores By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.507[a]	5	.260
N of Valid Cases	17		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .29.

Table 60: Chi-Square Analysis of No Exposure Group Index Scores According to Gender

			Index						Total
			9	10	11	12	13	14	
Gender	Male	Count	0	0	1	1	0	1	3
		% within Gender	0.0%	0.0%	33.3%	33.3%	0.0%	33.3%	100.0%
		% within Index	0.0%	0.0%	50.0%	50.0%	0.0%	20.0%	17.6%
		% of Total	0.0%	0.0%	5.9%	5.9%	0.0%	5.9%	17.6%
	Female	Count	1	4	1	1	3	4	14
		% within Gender	7.1%	28.6%	7.1%	7.1%	21.4%	28.6%	100.0%
		% within Index	100.0%	100.0%	50.0%	50.0%	100.0%	80.0%	82.4%
		% of Total	5.9%	23.5%	5.9%	5.9%	17.6%	23.5%	82.4%
Total		Count	1	4	2	2	3	5	17
		% within Gender	5.9%	23.5%	11.8%	11.8%	17.6%	29.4%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	23.5%	11.8%	11.8%	17.6%	29.4%	100.0%

Table 61: No-Facebook Control Group Index Scores By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.614[a]	5	.465
N of Valid Cases	17		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .18.

Table 62: Chi-Square Analysis of No-Facebook Control Group Index Scores According to Gender

			Rating						Total
			1	2	3	4	5	7	
Gender	Male	Count	0	0	1	1	2	1	5
		% within Gender	0.0%	0.0%	20.0%	20.0%	40.0%	20.0%	100.0%
		% within Rating	0.0%	0.0%	25.0%	20.0%	50.0%	33.3%	27.8%
		% of Total	0.0%	0.0%	5.6%	5.6%	11.1%	5.6%	27.8%
	Female	Count	1	1	3	4	2	2	13
		% within Gender	7.7%	7.7%	23.1%	30.8%	15.4%	15.4%	100.0%
		% within Rating	100.0%	100.0%	75.0%	80.0%	50.0%	66.7%	72.2%
		% of Total	5.6%	5.6%	16.7%	22.2%	11.1%	11.1%	72.2%
Total		Count	1	1	4	5	4	3	18
		% within Gender	5.6%	5.6%	22.2%	27.8%	22.2%	16.7%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.6%	5.6%	22.2%	27.8%	22.2%	16.7%	100.0%

Table 63: High Exposure Group Rating Scores By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.966[a]	5	.854
N of Valid Cases	18		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .28.

Table 64: Chi-Square Analysis of High Exposure Group Rating Score According to Gender

			Rating					Total
			2	3	4	5	6	
Gender	Male	Count	1	0	1	0	0	2
		% within Gender	50.0%	0.0%	50.0%	0.0%	0.0%	100.0%
		% within Rating	33.3%	0.0%	25.0%	0.0%	0.0%	14.3%
		% of Total	7.1%	0.0%	7.1%	0.0%	0.0%	14.3%
	Female	Count	2	2	3	3	2	12
		% within Gender	16.7%	16.7%	25.0%	25.0%	16.7%	100.0%
		% within Rating	66.7%	100.0%	75.0%	100.0%	100.0%	85.7%
		% of Total	14.3%	14.3%	21.4%	21.4%	14.3%	85.7%
Total		Count	3	2	4	3	2	14
		% within Gender	21.4%	14.3%	28.6%	21.4%	14.3%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	21.4%	14.3%	28.6%	21.4%	14.3%	100.0%

Table 65: Medium Exposure Group Rating Scores By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.431[a]	4	.657
N of Valid Cases	14		

a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .29.

Table 66: Chi-Square Analysis of Medium Exposure Group Rating Score According to Gender

			Rating						Total
			1	2	3	4	5	7	
Gender	Male	Count	1	0	2	0	1	0	4
		% within Gender	25.0%	0.0%	50.0%	0.0%	25.0%	0.0%	100.0%
		% within Rating	25.0%	0.0%	66.7%	0.0%	33.3%	0.0%	28.6%
		% of Total	7.1%	0.0%	14.3%	0.0%	7.1%	0.0%	28.6%
	Female	Count	3	2	1	1	2	1	10
		% within Gender	30.0%	20.0%	10.0%	10.0%	20.0%	10.0%	100.0%
		% within Rating	75.0%	100.0%	33.3%	100.0%	66.7%	100.0%	71.4%
		% of Total	21.4%	14.3%	7.1%	7.1%	14.3%	7.1%	71.4%
Total		Count	4	2	3	1	3	1	14
		% within Gender	28.6%	14.3%	21.4%	7.1%	21.4%	7.1%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	14.3%	21.4%	7.1%	21.4%	7.1%	100.0%

Table 67: No Exposure Group Rating Scores By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.792[a]	5	.580
N of Valid Cases	14		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .29.

Table 68: Chi-Square Analysis of No Exposure Group Rating Score According to Gender

			Rating							Total
			1	2	3	4	5	6	7	
Gender	Male	Count	0	0	0	0	2	0	0	2
		% within Gender	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
		% within Rating	0.0%	0.0%	0.0%	0.0%	50.0%	0.0%	0.0%	14.3%
		% of Total	0.0%	0.0%	0.0%	0.0%	14.3%	0.0%	0.0%	14.3%
	Female	Count	2	1	1	3	2	2	1	12
		% within Gender	16.7%	8.3%	8.3%	25.0%	16.7%	16.7%	8.3%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	50.0%	100.0%	100.0%	85.7%
		% of Total	14.3%	7.1%	7.1%	21.4%	14.3%	14.3%	7.1%	85.7%
Total		Count	2	1	1	3	4	2	1	14
		% within Gender	14.3%	7.1%	7.1%	21.4%	28.6%	14.3%	7.1%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	14.3%	7.1%	7.1%	21.4%	28.6%	14.3%	7.1%	100.0%

Table 69: No-Facebook Control Group Rating Scores By Gender

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.833[a]	6	.442
N of Valid Cases	14		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .14.

Table 70: Chi-Square Analysis of No-Facebook Control Group Rating Score According to Gender

			Score			Total
			Important	Not So Important	Extremely Important	
Religion	Muslim	Count	1	2	13	16
		% within Religion	6.2%	12.5%	81.2%	100.0%
		% within Score	33.3%	100.0%	92.9%	84.2%
		% of Total	5.3%	10.5%	68.4%	84.2%
	Christian	Count	2	0	1	3
		% within Religion	66.7%	0.0%	33.3%	100.0%
		% within Score	66.7%	0.0%	7.1%	15.8%
		% of Total	10.5%	0.0%	5.3%	15.8%
Total		Count	3	2	14	19
		% within Religion	15.8%	10.5%	73.7%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	15.8%	10.5%	73.7%	100.0%

Table 71: High Exposure Group Responses to Question 2 By Religious Affiliation

			Score		Total
			Very Important	Extremely Important	
Religion	Muslim	Count	2	11	13
		% within Religion	15.4%	84.6%	100.0%
		% within Score	100.0%	84.6%	86.7%
		% of Total	13.3%	73.3%	86.7%
	Christian	Count	0	2	2
		% within Religion	0.0%	100.0%	100.0%
		% within Score	0.0%	15.4%	13.3%
		% of Total	0.0%	13.3%	13.3%
Total		Count	2	13	15
		% within Religion	13.3%	86.7%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	13.3%	86.7%	100.0%

Table 72: Medium Exposure Group Responses to Question 2 By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.355[a]	1	.551		
Fisher's Exact Test				1.000	.743
N of Valid Cases	15				

a. 3 cells (75.0%) have expected count less than 5. The minimum expected count is .27.

b. Computed only for a 2x2 table

Table 73: Chi-Square Analysis of Medium Exposure Group Question 2 According to Religious Affiliation

			Score			Total
			Important	Very Important	Extremely Important	
Religion	Muslim	Count	2	1	13	16
		% within Religion	12.5%	6.2%	81.2%	100.0%
		% within Score	100.0%	50.0%	92.9%	88.9%
		% of Total	11.1%	5.6%	72.2%	88.9%
	Christian	Count	0	1	1	2
		% within Religion	0.0%	50.0%	50.0%	100.0%
		% within Score	0.0%	50.0%	7.1%	11.1%
		% of Total	0.0%	5.6%	5.6%	11.1%
Total		Count	2	2	14	18
		% within Religion	11.1%	11.1%	77.8%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	11.1%	11.1%	77.8%	100.0%

Table 74: No Exposure Group Responses to Question 2 By Religious Affiliation

			Score			Total
			Important	Very Important	Extremely Important	
Religion	Muslim	Count	5	4	6	15
		% within Religion	33.3%	26.7%	40.0%	100.0%
		% within Score	100.0%	100.0%	75.0%	88.2%
		% of Total	29.4%	23.5%	35.3%	88.2%
	Christian	Count	0	0	2	2
		% within Religion	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	25.0%	11.8%
		% of Total	0.0%	0.0%	11.8%	11.8%
Total		Count	5	4	8	17
		% within Religion	29.4%	23.5%	47.1%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	29.4%	23.5%	47.1%	100.0%

Table 75: No-Facebook Control Group Responses to Question 2 By Religious Affiliation

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.550[a]	2	.279
N of Valid Cases	17		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .47.

Table 76: Chi-Square Analysis of No-Facebook Control Group Question 2 According to Religious Affiliation

			Score			Total
			Worry A Little	Worry Some	Worry A Lot	
Religion	Muslim	Count	1	3	12	16
		% within Religion	6.2%	18.8%	75.0%	100.0%
		% within Score	100.0%	75.0%	85.7%	84.2%
		% of Total	5.3%	15.8%	63.2%	84.2%
	Christian	Count	0	1	2	3
		% within Religion	0.0%	33.3%	66.7%	100.0%
		% within Score	0.0%	25.0%	14.3%	15.8%
		% of Total	0.0%	5.3%	10.5%	15.8%
Total		Count	1	4	14	19
		% within Religion	5.3%	21.1%	73.7%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	5.3%	21.1%	73.7%	100.0%

Table 77: High Exposure Group Responses to Question 4 By Religious Affiliation

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.467[a]	2	.792
N of Valid Cases	19		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .16.

Table 78: Chi-Square Analysis of High Exposure Group Question 4 According to Religious Affiliation

			Score			Total
			Worry A Little	Worry Some	Worry A Lot	
Religion	Muslim	Count	1	2	12	15
		% within Religion	6.7%	13.3%	80.0%	100.0%
		% within Score	100.0%	100.0%	85.7%	88.2%
		% of Total	5.9%	11.8%	70.6%	88.2%
	Christian	Count	0	0	2	2
		% within Religion	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	14.3%	11.8%
		% of Total	0.0%	0.0%	11.8%	11.8%
Total		Count	1	2	14	17
		% within Religion	5.9%	11.8%	82.4%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	11.8%	82.4%	100.0%

Table 79: Medium Exposure Group Responses to Question 4 By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.486[a]	2	.784
N of Valid Cases	17		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .12.

Table 80: Chi-Square Analysis of Medium Exposure Group Question 4 According to Religious Affiliation

			Score		Total
			Worry Some	Worry A Lot	
Religion	Muslim	Count	3	13	16
		% within Religion	18.8%	81.2%	100.0%
		% within Score	100.0%	86.7%	88.9%
		% of Total	16.7%	72.2%	88.9%
	Christian	Count	0	2	2
		% within Religion	0.0%	100.0%	100.0%
		% within Score	0.0%	13.3%	11.1%
		% of Total	0.0%	11.1%	11.1%
Total		Count	3	15	18
		% within Religion	16.7%	83.3%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	16.7%	83.3%	100.0%

Table 81: No Exposure Group Responses to Question 4 By Religious Affiliation

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.450[a]	1	.502		
Fisher's Exact Test				1.000	.686
N of Valid Cases	18				

a. 3 cells (75.0%) have expected count less than 5. The minimum expected count is .33.

b. Computed only for a 2x2 table

Table 82: Chi-Square Analysis of No Exposure Group Question 4 According to Religious Affiliation

			Score		Total
			Worry Some	Worry A Lot	
Religion	Muslim	Count	3	12	15
		% within Religion	20.0%	80.0%	100.0%
		% within Score	100.0%	85.7%	88.2%
		% of Total	17.6%	70.6%	88.2%
	Christian	Count	0	2	2
		% within Religion	0.0%	100.0%	100.0%
		% within Score	0.0%	14.3%	11.8%
		% of Total	0.0%	11.8%	11.8%
Total		Count	3	14	17
		% within Religion	17.6%	82.4%	100.0%
		% within Score	100.0%	100.0%	100.0%
		% of Total	17.6%	82.4%	100.0%

Table 83: No-Facebook Control Group Responses to Question 4 By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.486[a]	1	.486		
Fisher's Exact Test				1.000	.669
N of Valid Cases	17				

a. 3 cells (75.0%) have expected count less than 5. The minimum expected count is .35.

b. Computed only for a 2x2 table

Table 84: Chi-Square Analysis of No-Facebook Control Group Question 4 According to Religious Affiliation

			Score					Total
			Talk Not At All	Talk Rarely	Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Religion	Muslim	Count	1	0	5	8	2	16
		% within Religion	6.2%	0.0%	31.2%	50.0%	12.5%	100.0%
		% within Score	100.0%	0.0%	100.0%	80.0%	100.0%	84.2%
		% of Total	5.3%	0.0%	26.3%	42.1%	10.5%	84.2%
	Christian	Count	0	1	0	2	0	3
		% within Religion	0.0%	33.3%	0.0%	66.7%	0.0%	100.0%
		% within Score	0.0%	100.0%	0.0%	20.0%	0.0%	15.8%
		% of Total	0.0%	5.3%	0.0%	10.5%	0.0%	15.8%
Total		Count	1	1	5	10	2	19
		% within Religion	5.3%	5.3%	26.3%	52.6%	10.5%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.3%	5.3%	26.3%	52.6%	10.5%	100.0%

Table 85: High Exposure Group Responses to Question 5 By Religious Affiliation

			Score			Total
			Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Religion	Muslim	Count	3	2	10	15
		% within Religion	20.0%	13.3%	66.7%	100.0%
		% within Score	100.0%	100.0%	83.3%	88.2%
		% of Total	17.6%	11.8%	58.8%	88.2%
	Christian	Count	0	0	2	2
		% within Religion	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	16.7%	11.8%
		% of Total	0.0%	0.0%	11.8%	11.8%
Total		Count	3	2	12	17
		% within Religion	17.6%	11.8%	70.6%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	17.6%	11.8%	70.6%	100.0%

Table 86: Medium Exposure Group Responses to Question 5 By Religious Affiliation

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.944[a]	2	.624
N of Valid Cases	17		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .24.

Table 87: Chi-Square Analysis of Medium Exposure Group Question 5 According to Religious Affiliation

			Score			Total
			Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Religion	Muslim	Count	5	2	8	15
		% within Religion	33.3%	13.3%	53.3%	100.0%
		% within Score	100.0%	100.0%	80.0%	88.2%
		% of Total	29.4%	11.8%	47.1%	88.2%
	Christian	Count	0	0	2	2
		% within Religion	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	20.0%	11.8%
		% of Total	0.0%	0.0%	11.8%	11.8%
Total		Count	5	2	10	17
		% within Religion	29.4%	11.8%	58.8%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%
		% of Total	29.4%	11.8%	58.8%	100.0%

Table 88: No Exposure Group Responses to Question 5 By Religious Affiliation

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.587[a]	2	.452
N of Valid Cases	17		

a. 5 cells (83.3%) have expected count less than 5. The minimum expected count is .24.

Table 89: Chi-Square Analysis of No Exposure Group Question 5 According to Religious Affiliation

			Score				Total
			Talk Rarely	Talk Sometimes	Talk Frequently	Talk Almost Every Day	
Religion	Muslim	Count	1	5	4	5	15
		% within Religion	6.7%	33.3%	26.7%	33.3%	100.0%
		% within Score	100.0%	100.0%	100.0%	71.4%	88.2%
		% of Total	5.9%	29.4%	23.5%	29.4%	88.2%
	Christian	Count	0	0	0	2	2
		% within Religion	0.0%	0.0%	0.0%	100.0%	100.0%
		% within Score	0.0%	0.0%	0.0%	28.6%	11.8%
		% of Total	0.0%	0.0%	0.0%	11.8%	11.8%
Total		Count	1	5	4	7	17
		% within Religion	5.9%	29.4%	23.5%	41.2%	100.0%
		% within Score	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	29.4%	23.5%	41.2%	100.0%

Table 90: No-Facebook Control Group Responses to Question 5 By Religion

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.238[a]	3	.356
N of Valid Cases	17		

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .12.

Table 91: Chi-Square Analysis of No-Facebook Control Group Question 5 According to Religious Affiliation

			Index					Total
			9	10	12	13	14	
Religion	Muslim	Count	1	3	3	8	1	16
		% within Religion	6.2%	18.8%	18.8%	50.0%	6.2%	100.0%
		% within Index	50.0%	75.0%	100.0%	88.9%	100.0%	84.2%
		% of Total	5.3%	15.8%	15.8%	42.1%	5.3%	84.2%
	Christian	Count	1	1	0	1	0	3
		% within Religion	33.3%	33.3%	0.0%	33.3%	0.0%	100.0%
		% within Index	50.0%	25.0%	0.0%	11.1%	0.0%	15.8%
		% of Total	5.3%	5.3%	0.0%	5.3%	0.0%	15.8%
Total		Count	2	4	3	9	1	19
		% within Religion	10.5%	21.1%	15.8%	47.4%	5.3%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	10.5%	21.1%	15.8%	47.4%	5.3%	100.0%

Table 92: High Exposure Group Index Scores By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.914[a]	4	.572
N of Valid Cases	19		

a. 9 cells (90.0%) have expected count less than 5. The minimum expected count is .16.

Table 93: Chi-Square Analysis of High Exposure Group Index Scores According to Religious Affiliation

			Index				Total
			10	12	13	14	
Religion	Muslim	Count	2	2	2	9	15
		% within Religion	13.3%	13.3%	13.3%	60.0%	100.0%
		% within Index	100.0%	100.0%	100.0%	81.8%	88.2%
		% of Total	11.8%	11.8%	11.8%	52.9%	88.2%
	Christian	Count	0	0	0	2	2
		% within Religion	0.0%	0.0%	0.0%	100.0%	100.0%
		% within Index	0.0%	0.0%	0.0%	18.2%	11.8%
		% of Total	0.0%	0.0%	0.0%	11.8%	11.8%
Total		Count	2	2	2	11	17
		% within Religion	11.8%	11.8%	11.8%	64.7%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	11.8%	11.8%	11.8%	64.7%	100.0%

Table 94: Medium Exposure Group Index Scores By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.236[a]	3	.744
N of Valid Cases	17		

a. 7 cells (87.5%) have expected count less than 5. The minimum expected count is .24.

Table 95: Chi-Square Analysis of Medium Exposure Group Index Scores According to Religious Affiliation

			Index						Total
			9	10	11	12	13	14	
Religion	Muslim	Count	1	1	1	4	2	6	15
		% within Religion	6.7%	6.7%	6.7%	26.7%	13.3%	40.0%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	66.7%	85.7%	88.2%
		% of Total	5.9%	5.9%	5.9%	23.5%	11.8%	35.3%	88.2%
	Christian	Count	0	0	0	0	1	1	2
		% within Religion	0.0%	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
		% within Index	0.0%	0.0%	0.0%	0.0%	33.3%	14.3%	11.8%
		% of Total	0.0%	0.0%	0.0%	0.0%	5.9%	5.9%	11.8%
Total		Count	1	1	1	4	3	7	17
		% within Religion	5.9%	5.9%	5.9%	23.5%	17.6%	41.2%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	5.9%	5.9%	23.5%	17.6%	41.2%	100.0%

Table 96: No Exposure Group Index Scores By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.321[a]	5	.803
N of Valid Cases	17		

a. 11 cells (91.7%) have expected count less than 5. The minimum expected count is .12.

Table 97: Chi-Square Analysis of No Exposure Group Index Scores According to Religious Affiliation

			Index						Total
			9	10	11	12	13	14	
Religion	Muslim	Count	1	4	2	2	3	3	15
		% within Religion	6.7%	26.7%	13.3%	13.3%	20.0%	20.0%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	60.0%	88.2%
		% of Total	5.9%	23.5%	11.8%	11.8%	17.6%	17.6%	88.2%
	Christian	Count	0	0	0	0	0	2	2
		% within Religion	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
		% within Index	0.0%	0.0%	0.0%	0.0%	0.0%	40.0%	11.8%
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	11.8%	11.8%
Total		Count	1	4	2	2	3	5	17
		% within Religion	5.9%	23.5%	11.8%	11.8%	17.6%	29.4%	100.0%
		% within Index	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.9%	23.5%	11.8%	11.8%	17.6%	29.4%	100.0%

Table 98: No-Facebook Control Group Index Scores By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.440[a]	5	.365
N of Valid Cases	17		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .12.

Table 99: Chi-Square Analysis of No-Facebook Control Group Index Scores By Religious Affiliation

			Rating						Total
			1	2	3	4	5	7	
Religion	Muslim	Count	1	1	4	3	3	3	15
		% within Religion	6.7%	6.7%	26.7%	20.0%	20.0%	20.0%	100.0%
		% within Rating	100.0%	100.0%	100.0%	60.0%	75.0%	100.0%	83.3%
		% of Total	5.6%	5.6%	22.2%	16.7%	16.7%	16.7%	83.3%
	Christian	Count	0	0	0	2	1	0	3
		% within Religion	0.0%	0.0%	0.0%	66.7%	33.3%	0.0%	100.0%
		% within Rating	0.0%	0.0%	0.0%	40.0%	25.0%	0.0%	16.7%
		% of Total	0.0%	0.0%	0.0%	11.1%	5.6%	0.0%	16.7%
Total		Count	1	1	4	5	4	3	18
		% within Religion	5.6%	5.6%	22.2%	27.8%	22.2%	16.7%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.6%	5.6%	22.2%	27.8%	22.2%	16.7%	100.0%

Table 100: High Exposure Group Rating Scores By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.960[a]	5	.555
N of Valid Cases	18		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .17.

Table 101: Chi-Square Analysis of High Exposure Group Rating Scores By Religious Affiliation

			Rating					Total
			2	3	4	5	6	
Religion	Muslim	Count	3	2	3	2	2	12
		% within Religion	25.0%	16.7%	25.0%	16.7%	16.7%	100.0%
		% within Rating	100.0%	100.0%	75.0%	66.7%	100.0%	85.7%
		% of Total	21.4%	14.3%	21.4%	14.3%	14.3%	85.7%
	Christian	Count	0	0	1	1	0	2
		% within Religion	0.0%	0.0%	50.0%	50.0%	0.0%	100.0%
		% within Rating	0.0%	0.0%	25.0%	33.3%	0.0%	14.3%
		% of Total	0.0%	0.0%	7.1%	7.1%	0.0%	14.3%
Total		Count	3	2	4	3	2	14
		% within Religion	21.4%	14.3%	28.6%	21.4%	14.3%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	21.4%	14.3%	28.6%	21.4%	14.3%	100.0%

Table 102: Medium Exposure Group Rating Scores By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.431[a]	4	.657
N of Valid Cases	14		

a. 10 cells (100.0%) have expected count less than 5. The minimum expected count is .29.

Table 103: Chi-Square Analysis of Medium Exposure Group Rating Scores By Religious Affiliation

			Rating						Total
			1	2	3	4	5	7	
Religion	Muslim	Count	4	1	3	1	3	1	13
		% within Religion	30.8%	7.7%	23.1%	7.7%	23.1%	7.7%	100.0%
		% within Rating	100.0%	50.0%	100.0%	100.0%	100.0%	100.0%	92.9%
		% of Total	28.6%	7.1%	21.4%	7.1%	21.4%	7.1%	92.9%
	Christian	Count	0	1	0	0	0	0	1
		% within Religion	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Rating	0.0%	50.0%	0.0%	0.0%	0.0%	0.0%	7.1%
		% of Total	0.0%	7.1%	0.0%	0.0%	0.0%	0.0%	7.1%
Total		Count	4	2	3	1	3	1	14
		% within Religion	28.6%	14.3%	21.4%	7.1%	21.4%	7.1%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	28.6%	14.3%	21.4%	7.1%	21.4%	7.1%	100.0%

Table 104: No Exposure Group Rating Scores By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.462[a]	5	.264
N of Valid Cases	14		

a. 12 cells (100.0%) have expected count less than 5. The minimum expected count is .07.

Table 105: Chi-Square Analysis of No Exposure Group Rating Scores By Religious Affiliation

			Rating							Total
			1	2	3	4	5	6	7	
Religion	Muslim	Count	1	1	1	3	4	2	1	13
		% within Religion	7.7%	7.7%	7.7%	23.1%	30.8%	15.4%	7.7%	100.0%
		% within Rating	50.0%	50.0%	100.0%	100.0%	100.0%	100.0%	100.0%	86.7%
		% of Total	6.7%	6.7%	6.7%	20.0%	26.7%	13.3%	6.7%	86.7%
	Christian	Count	1	1	0	0	0	0	0	2
		% within Religion	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
		% within Rating	50.0%	50.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%
		% of Total	6.7%	6.7%	0.0%	0.0%	0.0%	0.0%	0.0%	13.3%
Total		Count	2	2	1	3	4	2	1	15
		% within Religion	13.3%	13.3%	6.7%	20.0%	26.7%	13.3%	6.7%	100.0%
		% within Rating	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	13.3%	13.3%	6.7%	20.0%	26.7%	13.3%	6.7%	100.0%

Table 106: No-Facebook Control Group Rating Scores By Religious Affiliation

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.346[a]	6	.386
N of Valid Cases	15		

a. 14 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

Table 107: Chi-Square Analysis of No Exposure Group Rating Scores By Religious Affiliation