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A Dissonance Intervention to Reduce Implicit Prejudice Against Arab Muslims

Cheryl Alyssa Welch

A thesis submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

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FACULTY COMMITTEE:

Committee Chair: Jaime Kurtz

Committee Members/ Readers:

Natalie Kerr Lawrence

Jeff Dyche

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Abstract

With constant media coverage of hostility in the Middle East, and given recent acts of domestic terrorism such as the attacks of September 11, 2001, it is reasonable to assume that prejudice against the Arab-Muslim population has been increasing in the United States (Moore, 2002). There are many active campaigns advocating for both acceptance and the reduction of various types of prejudice and discrimination in our society.

However, the question is if these campaigns are actually successful in their goals. The current study sought to fill this gap by assessing a social intervention on its effectiveness in reducing prejudice towards the Arab-Muslim population. Using the induction of cognitive dissonance, 40 students at a mid-Atlantic university participated in a social intervention to possibly reduce implicit prejudice towards Arab-Muslims. Dissonance was induced by having a sample of participants with higher ratings on the anti-Arab-Muslim Prejudice scale publicly advocate for a pro-Islam community event. Reduction in implicit prejudice was measured by the difference in scores between the pre- and post-IAT test a week later. Due to a small sample size, no statistical significance could be found (184 words).

Introduction

Prejudice and stereotyping make up a major area of research in social psychology and other social sciences. Targets of discrimination vary between countries and even between regions within a country. Being a target of discrimination can have adverse effects both psychologically (e.g., depression, low self-esteem, and anxiety) and physically (e.g., violence, stress eating, and addictions) (Crocker & Major, 1989). Any group can become the target of discrimination, whether it be based on concepts such as weight, political affiliation, gender, sexual orientation, color of skin, or any other characteristic that can differentiate people from one another. This study aims to bring to light Arab-Muslim¹ prejudice, an area that seems to be overlooked in the current prejudice literature, as well as propose a potential method for reducing it.

Racism: Its Causes and Correlates

Racism (i.e. prejudice towards someone based solely on their race) is a worldwide phenomenon. Based on the history of each country, stigmatized groups differ around the world. This well-documented social issue has inspired many empirical studies (e.g., Correll et al., 2007; Devine, 1989; Ito & Urland, 2003; Ito, Urland, Willadsen-Jensen, & Correll, 2005). In response to the issues in media today regarding black oppression, such as the various shootings of unarmed black men by white officers, or anti-Arab-Muslim

¹It is important to note that, in the prejudice literature, this form of prejudice has been labeled "Arab-Muslim" prejudice. This label is not correct in the association of Islam and Saudi Arabia. Simply because someone is Muslim does not mean that are Arabic, and vice versa. This label reflects the misperception of prejudice towards these groups of people as they are commonly paired together. If someone looks Middle Eastern or Arabic, they are commonly stereotyped as a Muslim. While these two identities are not necessarily related, they both lead to the same stigmatization from uneducated misperceptions of prejudiced individuals.

sentiment seen after terrorist attacks, researchers have been motivated to find ways to understand and potentially fix these issues.

For instance, as a reaction to racial issues regarding police officers, a study was conducted to see if there was a factual basis for the stereotype of the 'racist white police officer' (Correll et al., 2007). Two groups of white police officers (a sample from the Denver police department and a sample recruited at a national convention) and a group of diverse (i.e. multicultural) community members performed an Implicit Association Test (Greenwald et al., 1998). A shooting game derived from this task compared the latency response, or the time interval spent hesitating to respond correctly to the stimulus (Fazio, 1990), and accuracy of shooting armed targets in a simulated shooting task. The armed targets fell into one of two categories: congruent and incongruent. Congruent trials consisted of targets that matched a stereotype, in this case, unarmed white men and armed black men. The incongruent trials consisted of images that did not abide by the stereotypes (i.e. armed white men and unarmed black men). Correll et al. (2007) found that while latency response differed between shots fired at white and black men in the game, police officers proved to be quicker and more accurate than the average community member. These results indicated that while the stereotype may not fully hold true because shooting accuracy was not affected by stereotypes, the latency response indicates that there is still hesitation when responding against a stereotype.

Other studies have looked at the automatic versus controlled components of stereotypes and prejudice (Devine, 1989). Stereotypes can be automatically acknowledged within about 170 milliseconds after the visual stimulus (in this case, a face of the stigmatized race) is presented (Ito & Urland, 2003). While these associations (e.g.,

“black” and “bad”) can be engrained into children when they are young (Garret, Ein, & Tremaine, 1977), as they get older and learn skills such as self-regulation, they can attempt to control their use of stereotypes (Galliot et al., 2007). Devine (1989) found that only participants with low overt prejudice were able to inhibit the automatically activated stereotype-congruent thoughts and replace them with thoughts of equality, although this process requires effortful, controlled processing. Using event-related brain potentials, this automatic evaluation has been found to occur within 300 milliseconds of introduction to the stimuli (Ito, Urland, Willadsen-Jensen, & Correll, 2005). While people may be able to control their behaviors in regards to prejudice and stereotyping, changing our automatic responses and attitudes appears to be the more difficult task because they are deeply engrained and tend to happen so quickly and unconsciously.

Explicit Versus Implicit Prejudice

Researchers often describe two types of prejudice: explicit and implicit. Explicit prejudice consists of attitudes that are perceived by the individual and are often self-reported. Implicit prejudice on the other hand, is prejudice that we are not aware we possess. This type of prejudice can be seen through nonverbal cues (Dovidio, Kawakami & Gaertner, 2002), latency response (Correll, Urland & Ito, 2006), mouse-tracking (Freeman & Ambady, 2010), and stimulation of different neural structures in response various stimuli (Amodio, 2014; Ito et al., 2007).

As mentioned previously, explicit prejudice is typically measured through self-report, such as the Modern Racism Scale (McConahay, 1986) and the Racism and Life Experiences Scale (Harrell, 2000). Explicit prejudice can also be seen in interviews and interactions, as it results from controlled processes. In contrast, implicit prejudice is

controlled by automatic processes that are unknown to, and out of the control of, the individual. Therefore, traditional self-report measures cannot be used. Instead, reaction time measures and equipment such as fMRIs, and EKGs have been used to identify implicit attitudes and prejudice.

Implicit attitudes have been found to be better predictors of discriminatory behavior than explicit attitudes (Greenwald et al., 1998). Being that implicit processes are ones that people cannot identify within themselves, they could potentially affect and even act as antecedents of our explicit prejudice, attitudes and behaviors. For this reason, it is important to study both the explicit and implicit aspects of one's evaluative attitude towards others.

The Implicit Association Test (IAT; Greenwald et al., 1998) was created to measure implicit attitudes. The IAT has been said to be the most reliable and widely used implicit measure (De Houwer, 2001; Gawronski & Payne, 2011). In this test, latency response is measured for both stereotypes and counter-stereotypes of two groups and then compared. Implicit racial bias occurs when latency response is greater in the counter-stereotype blocks (Park, Felix, & Lee, 2007). A meta-analysis found these types of measures to have a sufficient reliability with a Cronbach's alpha of .80 (Hofman, Gawrinski, Gschwender, Le, & Schmidt, 2005).

Arab-Muslim Prejudice

Many cultural prejudices form after violent incidences. This was seen after the attack on Pearl Harbor, where the United States created internment camps for Americans of Japanese-decent. More recently, after the attacks on the World Trade Center and the Pentagon on September 11, 2001, hate crimes against Arab-Muslims rose exponentially

(Moore, 2002). In fact, over 700 violent confrontations and 800 incidents of workplace discrimination against people perceived to be Arab or Muslim occurred in the months following September 11 (Awad, 2010). In addition, approximately 80 passengers were illegally removed from airplanes during this time due to their Arab-Muslim appearance (Ibish, 2003; Moore, 2002). It is important to note that these statistics are only representative of those that were reported. There is a good chance that many more examples of discrimination occurred but went unreported.

With this new rise in prejudice against Arab-Muslims, studies were conducted to provide scientific evidence of the adverse effects of the September 11 attack on this community (Awad, 2010; Ernest, Bornstein & Venable, 2003; Park, Felix, & Lee, 2007). Awad (2010) performed a study on perceived discrimination for Arab/Middle Eastern Americans. This study recorded perceived discrimination from the target's point of view and found that 52 percent of the participants reported hearing comments made to them or about them that implied they were dangerous due to their ethnicity. Other offensive comments about their ethnicity were also reported by 77 percent of the sample. This presents just a few of the discriminatory acts towards stigmatized individuals that were influenced by prejudicial attitudes.

In the United States, despite the enduring prejudice against Blacks shown in the media and the numerous studies that indicate a negative bias, one study found that Americans hold an implicit preference for blacks over Arab-Muslims (Park, Felix & Lee, 2007). They found that when measured by an IAT, participants had faster response times during black and pleasant-wording combinations than in Arab-Muslim and pleasant-wording combinations.

Prejudice against this community is found all over the world. For instance, Agerström and Rooth (2009) had 158 Swedish employers take the Arab-Muslim adapted IAT and found that latency response times were higher in the incongruent (nonstereotypical, such as pairing Arab-Muslims with “ambitious”) condition when compared to the congruent (stereotypical) condition, such as pairing Arab-Muslims with “lazy”. These results showed that employers were more likely to associate Arab-Muslim men with negative attributes and Swedish men with positive attributes. Arab-Muslim men were automatically paired with words that insinuated low productivity. The negative associations found in this study provide evidence for possible hiring bias along with subsequent workplace discrimination.

The studies previously discussed show the prevalence and negative impact of prejudice and discrimination against Arab-Muslims (Agerström & Rooth, 2009; Awad, 2010; Ibish, 2003; Moore, 2002; Park et al., 2007) and make a strong argument for the development of an effective intervention to reduce this powerful and growing type of prejudice. A meta-analysis conducted by Paluck and Green (2009) found that interventions using concepts such as social categorization and cognitive dissonance have shown success in laboratory settings. However, these methodologies have yet to be used on Arab-Muslim prejudice.

Cognitive Dissonance

In 1957, Leon Festinger proposed the theory of cognitive dissonance. The theory states that when one has an attitude, belief, or behavior that is not in line with another, cognitive dissonance is produced. This is especially true when there are negative implications for the self (Aronson, 1992). For example, if people state that they are not

racist, but then take a racism scale and find out that they actually are, dissonance is created between their cognition of not being a racist person and their cognition of knowing their score. People do not like the uncomfortable feeling of dissonance, so they find ways to reduce it. This can be done in one of three ways. One way is by changing their cognitions. In this case, that would be simply changing the thought that they are not racist and realizing that they are in fact racist. They could also change their behavior, so they would have to stop being racially prejudiced. The last option is rationalization. For instance, in this case, they could rationalize the dissonance by saying “this test is not accurate” or “well, everyone is a little racist.”

Cognitive dissonance has been found to be one of the most influential and fundamental processes for various behaviors and decisions. It has even been claimed to be “the most important single development in social psychology” (Jones, 1976, p. x). Due to its far-reaching implications, the theory has been the topic of many studies (Aronson, 1992, 1999; Aronson et, Fried & Stone 1991; Best & Steffy 1971; Leippe & Eisenstadt, 1994; Stone et al., 1994; Stone et al., 1997). There are two approaches used for inducing cognitive dissonance to alter beliefs and behaviors: hypocrisy induction and counter-attitudinal advocacy.

Performing acts that produce cognitive dissonance can create a sense of hypocrisy. For example, if an advocate of environmental initiatives is found littering, the feeling of hypocrisy will be produced because their actions contradict their beliefs and what they have been known to advocate for. Many studies have been using the induction of hypocrisy to alter behavior (i.e. manipulating participant’s behavior by making them feel hypocritical) From reducing water usage while showering (Dickerson, 1992) and

phone-related distracted driving (Welch et al., 2014) to increasing safe sex practices (Aronson, Fried & Stone, 1991), hypocrisy induction interventions have been found to be very successful at causing immediate behavior change. After a meta-analysis of a variety of hypocrisy and cognitive dissonance interventions, Stone and Fernandez (2008) found that the successful interventions used the combination of public advocacy of a prosocial act and awareness of conflicting attitudes and behaviors in the participants' past.

A meta-analysis of a variety of cognitive dissonance interventions, found that the successful interventions used the counter-attitudinal advocacy method to change attitudes (Paluck & Green, 2009). In this type of dissonance intervention, participants publicly advocate for an attitude or behavior that contradicts with their own past behaviors and/or attitudes. This public advocacy creates the dissonance needed to reduce the targeted attitude. While similar to the hypocrisy induction approach, this method differs in two main ways: the sample and the awareness component. While hypocrisy induction can work for any sample, for counter-attitudinal advocacy the sample must consist of people who already display the targeted behavior or belief. Due to this requirement, making participants aware of past conflicting behaviors is not required as the sample would already be pretested for that requirement.

Some researchers have used counter-attitudinal advocacy in an attempt to reduce prejudice. For example, in an effort to reduce German citizens' discomfort and prejudice towards Turks, Heitland and Bohner (2010) conducted a dissonance intervention where participants prepared and delivered a five-minute counter-attitudinal argument. They found that when participants were both made aware that their participation was completely their choice and had a perception of high threat towards their self-integrity,

discomfort and prejudice were significantly lower when compared to the other conditions. This shows that when the strength of dissonance is high, attitude change is most likely to occur. Similar results were found when applying the intervention to white students writing an essay which would favor black students over themselves (Leippe & Eisenstadt, 1994). Namely, participants who experienced the most dissonance changed their attitudes towards black students. Paluck and Green (2009) conducted a meta-analysis of research on prejudice reduction and found that dissonance interventions have shown a good amount of success in the lab setting.

While these studies are finding dissonance induction interventions to be effective, the area of research is not well studied (Paluck & Green, 2009), and more areas and targets of prejudice need to be studied before we can generalize their effectiveness to all prejudices. Specifically, previous research has seldom tested the longer-term outcomes of a dissonance manipulation. Do the effects linger once the experiment is over? Also, little research has examined the effect of counter-attitudinal advocacy on attitudes towards Arab-Muslims. Finally, very few studies have examined change in implicit attitudes (as measured by the IAT) over time.

The Current Study

The current study tested the effectiveness of a cognitive dissonance induction on reducing racial prejudice. The research question guiding this methodology was whether or not a counter-attitudinal advocacy intervention could reduce implicit prejudice. A within-subjects pretest/posttest design with a control group was used to investigate the research question. The independent variable was whether or not the student received the dissonance intervention. As previously discussed, inducing cognitive dissonance via

counter-attitudinal advocacy requires one to publically advocate for a cause that their attitudes and/or previous behaviors have not supported (Aronson, Wilson, Akert & Sommers, 2016). To help ensure feelings of dissonance occurred in the lab, participants were prescreened for high levels of anti-Arab/Muslim prejudice (Ernest, Bornstein & Venable, 2003). Those meeting the selection criteria were then invited to participate in the experimental portion of the study.

In the study, participants were randomly assigned to either the dissonance condition or the control condition. After exposure to a true-life account of racial discrimination against Arab-Muslim people experienced at a mosque in the Harrisonburg community, participants in the dissonance condition were asked to publically advocate for the discriminated group. Specifically, they were asked to make a radio recording promoting a community event hosted by the mosque. Pre- and post-measures were taken to measure explicit attitude change and to see if there were any changes in the latency response, or hesitation time (thought to be due to stereotyping), measured by an IAT (Greenwald et al., 1998). Secondary dependent variables were also collected during the one-week follow-up.

While the current study consists of only one independent variable and one primary dependent variable (i.e. change in latency response times) there were few secondary dependent measures included for theoretical and exploratory purposes. In regards to the primary dependent variable, it was hypothesized that the latency responses on the incongruent trials on the IATs would decrease after the intervention for the dissonance condition more than they would in the control condition. It was also predicted that responses on the follow-up questionnaire would show less prejudice from students

who participate in the dissonance intervention group. More specifically, the following outcomes were predicted:

H1: Students in the dissonance condition would decrease their latency response score significantly more than the students in the control condition.

H2: Students in the dissonance condition would select significantly more counter-stereotypical courses on the course list (described in the Procedure) than the students in the control condition.

H3: Students in the dissonance condition would have significantly higher scores on the follow-up Anti-Muslim Prejudice Scale than students in the control condition.

H4: Students in the dissonance condition would be significantly more likely to sign the pro-Arab petition (described below) than the students in the control condition.

In order to assess the first secondary dependent variable, a course selection task was added as a behavioral measure to assess possible effects of the intervention. The explicit measure used to prequalify participants for the study was also included in the follow-up survey to assess any changes in scores². Finally, the option for participants to sign a petition for a pro-Arab cause as another behavioral measurement was also included in the follow-up survey

Method

Participants

Participants were 56 college students enrolled in one or more psychology courses with an average age of 20 years. Due to missing data, attrition, and students' efficacy, 16 participants were excluded from data analysis³. The sample used for analysis consisted of 40 students (8 male and 32 female). Of the sample, 27 participants were recruited from introductory courses using a psychology participant pool and received class credit for participation. The other 13 participants were recruited from social psychology and

personality psychology courses and received extra credit for participation. No difference between these groups was observed when looking at their sample distributions. The ethnic composition consisted of 77.1% Caucasian, 4.2 % Pacific Islander, 2.1 % African American, and 16.7% unknown/other.

All students were preselected based on their responses to the Anti-Muslim Prejudice Scale (Ernest, Bornstein & Venable, 2003). Students with scores averaging six or lower (out of a range from 1 to 9) were invited to complete the entire study. Due to the purpose of testing the effectiveness of a prejudice-reduction intervention, having a sample with a baseline of higher prejudice was most appropriate. A total of 430 students qualified and were invited to participate in the study. The 521 students who took the prequalification survey, but did not qualify for the rest of the study, still received a participation credit for completing the prequalifying survey.

Materials

The Anti-Muslim Prejudice Scale.

The Anti-Muslim Prejudice Scale (Ernest, Bornstein & Venable, 2003) is a 20-item explicit measure of prejudice. Each item contains a statement about Muslims and can be responded to using a 9-point Likert-type scale ranging from -4 (*very strongly disagree*) to 4 (*very strongly agree*). Half of the items on this measure are reverse coded.

²With the topic of the experiment involving behavior and attitudes that can be heavily influenced by perceived social pressure from the intervention, I was concerned with people choosing courses that seem more socially acceptable instead of stating their true opinion. Asking the question a week later and in private via a Qualtrics survey, should have helped reduce the influence of social desirability and increase the likelihood of participants providing their true preferences.

³A total of 16 participants were excluded from data analysis due to attrition (7), lack of effort and efficacy (3), too many errors on the IAT to calculate a latency response score (2), not completing all tasks (2), withdrawal (1) and not showing up to the experiment (1).

Example items include "The basic teachings of Islam must be condemned as evil" and "When conflicts arise, Muslims are cowards and do not fight honorably." To aid in interpretation and analysis, data was recoded from the original scale ranging from -4 to 4 to a scale ranging from 1 to 9 where -4 equals 1, -3 equals 2, and so on.

This scale was chosen for the present study over other scales for two reasons. First, it was used in Park et al. (2007)'s study as the explicit measure of Arab-Muslim prejudice. The scale has been found to be internally consistent (Cronbach's alphas ranging from .92 to .94 in three samples; Ernest et al., 2003) and was cross-validated (Scott, Cardell & VonWaldner, 2004). When creating the IAT for this study, researchers followed a similar format to the one used in Park et al. (2007) with the presumption that using their explicit measure would similarly fit the current study. Second, older scales, such as the adapted Modern Racism Scale (MRS; McConahay, 1986) have documented weaknesses that newer scales have been created to accommodate. The MRS was originally created to study prejudice against African Americans. However, unlike most African Americans, many Arab-Muslims both in the United States and in Europe maintain their original citizenship, culture, and traditions as opposed to conforming to modern American or European culture. This difference makes items like "getting too demanding in their push for equal rights" inappropriate (Lee et al., 2013, p. 160). Arab-Muslims also come from countries considered to be enemies of many Western and European countries, thus creating a different relationship with Anglo or Western people than that of African-Americans (Echebarria-Echabe & Guede, 2007). This study's goal was to create an intervention that can be used in a variety of settings, so having a measure robust enough for various contexts was important.

Implicit association test (IAT).

For the purpose of this study, an IAT assessing Arab-Muslim prejudice was created. While there are existing Arab-Muslim IATs, researchers that use these pre-existing measures can only gain results of rankings on a Likert-type scale (i.e., extremely low in implicit prejudice, moderately low in implicit prejudice, etc.). In order to gain the raw data of latency response time to conduct a more thorough analysis, the development of a new measure was necessary.

To ensure high validity of the newly created measure, the word and name banks were derived from previously validated IAT measures (Park et al., 2007). To facilitate the creation of a new IAT to measure latency response in Arab-Muslim associations researchers used *SocialSci*, a website that provides software for creating a variety of measures used in social psychological studies. Following instructions provided by the website. Researchers were able to personalize the IAT to the current study's needs. The IAT was counterbalanced using randomization through the Qualtrics survey administered during the lab session. Counterbalancing the IATs by switching the order of the blocks was necessary to ensure there was no influence of side bias. Approximately half of the IATs administered started with the congruent trials and the other half started with the incongruent trials. A combinations of targets, attributes, and stimuli were required for the creation of this measure.

Target groups.

Targets consist of the two or more groups being compared. In this case, this would be the Arab-Muslim group and the American (i.e. Anglo name) group. The stimuli for these groups are made up of names associated with each group. These stimulus names

were derived from Park et al. (2007), who used these names in an IAT they created to compare implicit preference between whites, blacks, and Arab-Muslims (see Table 1). The names chosen for this study were the result of a pretest conducted by Park et al. (2007) to measure association between name and race. Results of this study showed not only a clear distinction of association with the targeted race, but, as mentioned above, also found an interesting implicit preference for Black names over Arab-Muslims names.

Association attributes.

The attributes consist of areas of association between groups. These can include employment, word connotations, personality attributes, stereotypes, and much more. Because the current study strives to gauge prejudice against Arab-Muslims, stimulus categories were derived from a list of pleasant and unpleasant words from an IAT created by Park et al. (2007). The stimulus words used (see Table 1) were adopted from in the original IAT created by Greenwald et al. (1998). The association to good and bad helps identify prejudice by showing one's hesitation to put the correct answer when it goes against their stereotypical or automatic response.

TABLE 1. Word Bank used to create the IAT (Park et al., 2007)

White Name	Arab Name	Pleasant Word	Unpleasant Word
Adam	Ammar	Diamond	Abuse
Andrew	Jaafar	Freedom	Cancer
Chip	Haashim	Heaven	Evil
Frank	Hassan	Honest	Filth
Jonathan	Muhammad	Honor	Pollute
Justin	Nadeem	Love	Poverty
Harry	Rashid	Loyal	Rotten
Matthew	Saad	Lucky	Sickness
Roger	Umar	Peace	Stink
Stephen	Zahir	Rainbow	Vomit

Procedure

The study consisted of a prequalifying survey, one lab session where the pretest was collected, and a posttest. Table 2 summarizes the steps of the procedure.

Pretest. The qualifying survey, the Anti-Muslim Prejudice Scale (Ernest, Bornstein & Venable, 2003) mentioned above, was posted on the SONA participant pool system (see Appendix A) as part 1 of the study. Using this survey, researchers identified students who rated higher on racial bias against Arab-Muslims (a score of 6.0 or lower). Once participants were selected, those who signed up for the lab session were randomly assigned to either the intervention condition or the control condition.

Lab session. Researchers led each participant to an individual testing room where they conducted the study using a Qualtrics survey. They were first provided a code number to enter into the survey when prompted. Using this code to link all material provided by the participant allowed for data comparison across time and identify the condition of participation while still providing confidentiality.

The first page of the survey included an informed consent agreement in which they agreed to participate in the study by entering their school email on the signature line. The following page informed the participants that the study was designed to examine the response times on racial associations and provided a link to the IAT.

The IAT included instructions within the program. Following the IAT, the intervention continued via Qualtrics. The conditions were randomized through the Qualtrics system. In the dissonance group, the intervention required them to make a public commitment. The next page provided a real news article from *The Washington Post* about vandalism that happened on a mosque in Harrisonburg in 2012. The

participants responded to a prompt asking them to record their initial reactions to the article in a response box provided (see Appendix B).

Next, they recorded a statement for the university radio. The radio recording included a statement promoting acceptance of Islam, as well as a community event that the mosque was holding to celebrate the diversity of Harrisonburg's residents. Experimenters provided an audio recorder in the testing room upon the participants' arrival and the instructions on Qualtrics supplied a sample statement (see below) with space underneath for students to write their own statement. The instructions emphasized that the participant could spend a few minutes practicing their statement and re-record as many times as they would like in an effort to reduce any performance anxiety the task may cause. Statements consisted of a pro-Arab-Muslim statement, the student's name, and an invitation to the community event. An example of this is:

“Not all Muslims are radicals. Please join me “insert name” in supporting the Islamic Center of the Shenandoah Valley to celebrate the diversity and acceptance of our community”

Students in the control condition also read the news article from *The Washington Post* about the vandalism and were prompted to record their initial reaction to the article. Following their responses to the prompt, the participants also performed an audio recording task, however they received different instructions for the audio recording. The instructions they received explained that the research laboratory needed audio recorders for a future study and requested that the participants test out the equipment to make sure it works. Participants were provided the following neutral prompt to read aloud:

"If the university is closed because of inclement weather conditions or emergency situations, faculty members are prohibited from requiring students to attend events, classes, laboratories or any other functions on campus. However, students who are participating in off-campus activities such as internships, practica, student teaching or health services placements, or other assigned coursework at locations remote from campus, will still be required to keep and attend their assigned placements, unless the placement site is closed or the student is unable to safely reach the placement site. It is the responsibility of the student to contact the placement site to receive instructions on attendance at the site, and to notify the instructor of record in the course of any closings of the placement site or inability to reach the placement site because of closings or inclement weather conditions."

Upon completion of the audio recording task, the last page of the survey instructed participants to open the laboratory door to indicate their completion to the researchers. Researchers collected the audio recorder and thanked the participants for their participation. In the process of dismissing each participant, the researcher reminded them of the follow-up survey that would be sent out a week after their lab session (Fujii et al., 2013).

Post-test. The follow-up IAT was administered one week later in an effort to avoid a practice effect, as well as assessing the impact of the intervention after participants have been exposed to everyday life again. Prior to sending out the follow-up survey, a reminder email was sent to each participant notifying them of the follow-up survey soon to be sent out. In the email, I also included their code number to enter into the Qualtrics survey to allow tracking any changes in the pre- and post-test data.

Following the IAT, the next page contained a course preference task, created for the purpose of this study and ostensibly for an unrelated study. The instructions asked participants to select their top three choices of classes listed that the university is considering offering the following school year (see Appendix C). Each class listed

focused on the Middle East and had names that aligned with derogatory stereotypes of Arab-Muslims (e.g., “Jihad in the Quran”), or names contradicting the stereotypes (e.g., “Peace in the Middle East”).

A series of questions, scales, and demographic information followed the course selection task (refer to Appendix D). Upon completion of the survey items, participants had the option of signing a petition (Appendix E). The last page of the survey thanked participants for their time and participation.

TABLE 2. Procedural Steps of the Dissonance Induction
Order of the Study Procedure

Prequalification

1. Students completed the Anti-Muslim Prejudice Scale to prequalify for the study

Lab Session

2. Qualified participants completed the *pre-test* Arab-Muslim IAT
3. Participants read a news article about the vandalism that occurred on a Harrisonburg mosque in 2012 and recorded their initial reactions to it
4. Students in the *experimental condition* recorded an audio clip advocating for a community event hosted by the mosque
4. Students in the *control condition* created an audio recording to test out the equipment for a future study

Follow-Up one week later

5. Students completed the follow-up IAT
6. Students completed follow up survey including the original explicit prejudice measure, a class selection question, and some other questions in relation to Arab-Muslim bias
7. Students had the opportunity to sign a petition advocating for the reversal of Ahmed Mohamed's suspension at school

After Data Collection

8. Debriefing email was sent out
-

A debriefing email was sent out after the last participant completed the follow-up IAT and data had been aggregated. Debriefing was delayed due to studying a controversial issue, participants may have been more likely to talk about their experience with other potential participants which could have altered the results of the study. The debriefing email explained that I was studying the effects of prosocial activity towards the Arab-Muslim community on implicit preferences for Arab-Muslims. Due to the qualifying survey requiring all participants to be categorized as prejudiced against Arab-Muslims, I did not see it as ethical to fully debrief all details of the study (i.e. telling them specifics about the prequalifying survey).

Results

Due to the small sample size, there was not enough power to detect statistical significance in between-groups analyses. Power analysis conducted prior to data collection indicated a necessity of at least 30 participants in each group to ensure satisfactory power to detect significance. In response, descriptive analyses were evaluated in addition to exploratory analyses. The data for this study were assessed using a combination of *t*-tests and non-parametric analyses. Below is a description of the analysis used to evaluate each hypothesis:

H1: Students in the dissonance condition would decrease their latency response score significantly more than the students in the control condition.

To analyze the latency response disparity between the intervention group and control group, a difference score was calculated using a logarithm recommended by Greenwald, Nosek, and Banaji (2003). This logarithm has been assessed to be the best-performing calculation for latency response as it includes data from the practice trials, uses a metric calibrated by each respondent's latency variability, and includes a latency

penalty for errors. This process uses data from the two congruent blocks (B3 and B4) and the two incongruent blocks (B6 and B7). It requires the elimination of trials with latencies over 10,000 milliseconds (i.e. slow responses), as well as the elimination of subjects for whom more than 10% of trials have latencies less than 300 milliseconds (i.e. fast responses) because they fall outside the bounds of latency response and indicate error. Following the required exclusions, pooled variance was calculated for all trials in B3 and B6, and also for B4 and B7. Next, means of the correct latencies for B3, B4, B6, and B7 were calculated. To account for association errors (i.e. when participants clicked the key opposite of the requested association), incorrect trial times were replaced with the value of the sum of the block mean and an addition of 600 milliseconds (a penalty of two times the standard deviation of a latency response for the incorrect response). For example, if an incorrect trial had a latency time of 1057 milliseconds and the corresponding block mean for that trial was 730 milliseconds, the value would be replaced with 1330 milliseconds. After all incorrect trials were replaced, the blocks were again averaged. The new averages of the blocks were used to calculate the differences between B6 and B3 ($B6 - B3$), and B7 and B4 ($B7 - B4$). Each difference was then divided by its associated pooled variance. Finally, the two quotients were averaged to provide each participant's latency score. For a summary of this process, see Table 3.

An independent samples Mann-Whitney U -Test was conducted to examine whether latency scores decreased significantly more for participants in the dissonance condition ($M = 0.01$, $SD = 0.39$) than for participants in the control condition ($M = 0.08$, $SD = 0.39$). Due to the small sample size, a non-parametric test was required for analyzing this

hypothesis. No significant difference was found in difference scores between the groups. Therefore, the primary hypothesis was not supported.

TABLE 3. Summary of IAT Scoring Procedures (Greenwald et al., 2003)

Procedural steps for scoring IAT	
1	Deleted trials greater than 10,000 ms
2	Deleted subjects for whom more than 10% of trials had latencies less than 300 ms
3	Computed the "inclusive" standard deviation for all trials in B3 and B6 and likewise for all trials in B4 and B7
4	Computed the mean latency for responses for each of B3, B4, B6 and B7
5	Computed the two mean differences ($\text{Mean}_{B6} - \text{Mean}_{B3}$) and ($\text{Mean}_{B7} - \text{Mean}_{B4}$)
6	Divided each difference score by its associated "inclusive standard deviation
7	Latency score (D) is the equal-weight average of the two resulting ratios.

Note. This summary table is an adaption of the table from p. 92 of Lane, Banaji & Greenwald (2007, Table 3.3).

H2: Students in the dissonance condition would select significantly more counter-stereotypical courses on the course list (described in the Procedure) than the students in the control condition.

A Chi-square test of independence was calculated comparing the frequency of course selection in each condition. No significant interaction was found ($X^2(1) = 1.02, p = .31$) between the dissonance group and the control. However, Figure 1 illustrates an interesting trend. In the dissonance condition, 33% of participants selected a majority of counterstereotypical courses. This is an increase from the 18.8% that selected counterstereotypical courses in the control condition. While the statistical analysis did not yield significant results supporting the hypothesis, there was a trend in the predicted

direction. More research with an adequate sample size should be conducted to assess this question.

H3: Students in the dissonance condition would have significantly higher scores on the follow-up Anti-Muslim Prejudice Scale than students in the control condition.

An independent samples Mann-Whitney *U*-Test was conducted to assess any variation between conditions in difference scores of the pre- and posttest of the Anti-Muslim Prejudice Scale. While there was no significant difference between the dissonance condition ($M = 0.608$, $SD = 0.80$) and the control ($M = 0.77$, $SD = 0.95$), posttest group means ($M = 5.49$, $SD = 1.07$) for both conditions were significantly greater than the pretest group means ($M = 4.82$, $SD = 0.74$, $t(39) = -4.96$, $p < .001$). Higher scores indicate lower prejudice on the Anti-Muslim Prejudice Scale, so this suggests that explicit prejudice significantly decreased regardless of condition. Cohen's *D* indicated a large effect size ($d = .73$). Despite this interesting and significant finding, the hypothesis was not supported.

H4: Students in the dissonance condition would be significantly more likely to sign the pro-Arab petition (described below) than the students in the control condition.

A Chi-square analysis was performed to assess if participants in the dissonance condition were more likely to sign the pro-Arab petition than students in the control condition. Results indicated no significant interaction between condition and petition signature ($X^2(1) = 0.00$, $p = 1$). Participants were more likely to sign the petition (60%) than leave it blank, regardless of condition. The final hypothesis was not supported by these results.

Exploratory Analyses

Various descriptive statistics were assessed for exploratory purposes. While there was not enough power to confirm statistical significance between groups, some interesting trends were discovered regarding semester disparities, diversity of hometowns, and employment status. Data collection between semesters was compared to assess if there were any unpredicted differences resulting from world events (i.e. Texas clock-bomb incident, ISIS, and Syrian refugee crisis) occurring during the fall semester. Descriptive analyses of the fall semester showed trends in the direction of the first hypothesis regarding reduction in latency response scores for the group who received the intervention. Table 4 shows that participants in the control group showed a slight increase in latency response while participants in the dissonance condition showed a slight decrease. This trend was especially pronounced for participants who grew up in areas with moderate to high diversity (see Figure 2). This difference was not seen in the explicit measure.

The response disparities translate to the behavioral measures as well. Figure 3 and Figure 4 illustrate that participants were more likely to show interest in and advocate for pro-Arab-Muslim causes in the spring semester than the fall semester. Figure 3 shows that proportionately more participants chose counter-stereotypical courses in the spring semester. Similarly, participants were more likely to sign the petition for the pro-Arab-Muslim cause in the spring (see Figure 4).

Exploratory analyses were also conducted in relation to diversity. In the demographic information requested on the follow-up survey, participants recorded where they grew up and how diverse the area was. Participants who grew up in highly diverse

TABLE 4. Means, Standard Deviations, and Standard Error of the Means for Variables from Data Collection in the Fall Semester

	Condition	<i>N</i>	Mean	Std. Deviation	Std. Error Mean
IAT Score Difference	Control	9	.034	.511	.170
	Dissonance	9	-.057	.367	.122
IAT Score 2	Control	9	.576	.256	.085
	Dissonance	9	.525	.370	.123
Explicit Score 2	Control	9	5.317	1.187	.396
	Dissonance	9	5.233	1.543	.514
Explicit Score Difference	Control	9	1.006	1.084	.361
	Dissonance	9	.789	1.091	.364

areas ($N = 10$, $M = 2.36$, $SD = 1.69$) knew significantly more Arab-Muslims than participants who grew up in homogeneous areas ($N = 14$, $M = 12$, $SD = 10.24$), $t(22) = -3.49$, $p < .01$. Participants who grew up in highly diverse areas generally decreased their latency response, indicating that their implicit prejudice reduced from the previous IAT (see Figure 5). However, participants from moderately diverse and homogenous areas increased their latency response. Latency response was found to increase the most from participants who lived in moderately diverse areas.

When assessing the pretest and posttest explicit prejudice scores, an unexpected trend emerged. Generally, all participants increased their explicit prejudice score, which indicates a decrease in explicit prejudice (the higher scores indicate lower prejudice) or a

change in response due to demand characteristics. While all participants' explicit prejudice scores increased, participants from highly diverse areas displayed a larger reduction in explicit prejudice after being exposed to the dissonance intervention than participants who grew up in moderately diverse or homogeneous areas. Countering that finding, participants in the control condition were found to have the exact opposite response. Participants who were not exposed to the intervention were more likely to increase their explicit score when they were from homogeneous and moderately diverse areas than when they were from high diverse areas.

Lastly, a Chi-square analysis revealed a significant interaction between employment status and petition signature ($X^2(1) = 4.00, p = .046$). Students who were employed were significantly more likely to sign the pro-Arab-Muslim petition than those who were not employed (see Figure 7). Employed participants (52%) were more than twice more likely to sign the petition than unemployed students (20%).

Discussion

In the past, prejudice has been reduced through the use of cognitive dissonance interventions (Eisenstadt & Leippe, 2005; Heitland & Bohner, 2010; Paluck & Green, 2009). In addition, implicit attitudes have been found to be more predictive of discriminatory behavior than explicit attitudes (Greenwald et al., 1998). In line with this research, researchers hypothesized that a cognitive dissonance induction intervention would reduce implicit prejudice. In the present study, the counter-attitudinal advocacy method, focusing on Arab-Muslims, was used to induce cognitive dissonance in individuals who were screened for high levels of Arab-Muslim prejudice. Changes in implicit prejudice were measured through latency response differences collected from pre

and post IATs. However, even if a difference existed, statistical significance would not be detected due to the small sample size. A power analysis indicated the need for at least 30 participants in each group to ensure satisfactory power to detect statistical significance. Despite some promising trends in the predicted direction, none of the proposed hypotheses were statistically supported by the results.

Data were collected over the course of two semesters. Just weeks prior to the start of data collection, the Texas clock-bomb incident occurred and permeated across media outlets for the months following the event. In addition to the focus on the incident, ISIS and the Syrian refugee crisis inundated the news media. Constant exposure to these events may have influenced the attitudes and opinions of participants in the study. The majority of predicted trends existed only in the data collected in the fall, such as the dissonance condition decreasing latency response compared to the control. This leads researchers to believe that, in addition to a lack of power, the dissonance manipulation may not have been strong enough. Heitland and Bohner (2010) found that attitude change is most likely to occur when dissonance is the strongest. It is possible that salience of those events could have increased the prejudicial attitudes against Arab-Muslims and in response increased the strength of dissonance. This increase was seen in participants from both conditions, as participants overall were less likely to sign the pro-Arab petition or select counter-stereotypical courses during the fall semester. The increase in prejudicial attitudes could increase the magnitude of dissonance in the participants by making them feel more hypocritical for advocating for the group they showed bias towards.

There is a general deficiency of literature on research attempting to reduce implicit prejudice. This brings one to question the reason behind the paucity of this

research. Is the reason because implicit prejudice reduction is an area that has not yet attracted much focus? Or, have people attempted to reduce this form of prejudice, but due to a possible file-drawer effect, not published the results? This shortage may lead people to believe that implicit prejudice cannot be altered. Of the existing research on the topic, studies have found effective methods for reducing implicit prejudice. However, the malleability of implicit prejudice has only been found to be short-lived (Lai, Hoffman & Nosek, 2013).

Just this year, Lai, Skinner, Cooley and colleagues (2016) found nine interventions that successfully reduced implicit racial preferences. Comparable to Lai, Hoffman and Nosek (2013), there were no long-term changes in implicit preference. This brings into question whether implicit bias can truly be changed. The malleability of implicit preference does not translate to a complete change of the implicit bias. It indicates that these preferences can be altered in the short term, but not permanently reduced. Further research on the lasting effect of implicit bias malleability is needed to confirm whether or not an actual change is possible.

Due to the dearth of information in the area of research, a variety of information was collected for the purpose of exploratory analyses. In the follow-up survey, participants were asked to specify whether they grew up in a homogeneous, moderately diverse, or highly diverse area. In general, the trends showed that diversity had a positive impact on prejudicial outcomes. For example, in the fall semester, only the control condition increased their latency scores. In fact, participants from moderate to highly diverse areas showed greater decreases in latency response and explicit prejudice. However, there was an exception to this trend involving the group of participants who

indicated that they grew up in a moderately diverse area. On average, these participants were found to have an increasing latency response. These unexpected results could indicate factors not previously considered. It may be that while these individuals grew up in moderately diverse areas, those areas did not have an Arab-Muslim community. Lacking this community would mirror the same issue with lack of exposure faced by homogenous areas. This issue of exposure is commonly associated with higher levels of prejudice. The results may also be due to measurement error or the limitation of sample size. Certainly, more research is needed to better understand whether an actual relationship exists, or if these results just happen to be spurious noise within the data.

There was a puzzling finding in regards to the interaction of employment status and signing the pro-Arab-Muslim petition. Employed participants were significantly more likely to sign the petition than participants who were unemployed. No explanation was provided from any variable collected within the data. While one could say that this result was due to measurement error or the small sample size, the magnitude of the disparity makes one wonder if the results were merely a coincidence or due to error. Future research with a bigger sample size should look deeper into what variables could be associated with such an unforeseen interaction.

Trends from this preliminary study highlight two areas for further research. First, while there is a good deal of research on prejudice against African-Americans (Correll et al., 2007; Devine, 1989; Ito & Urland, 2003; Ito, Urland, Willadsen-Jensen, & Correll, 2005), there is surprisingly little on Arab-Muslim prejudice. Future research should investigate ways to reduce prejudice against this stigmatized group. Second, in attempting to reduce the levels of hate crimes (Awad, 2010; Ibish, 2003; Moore, 2002),

an effective lab intervention could be the foundational step for developing scientifically-based social interventions with such implications in mind.

Limitations

While this study aimed to have a strong methodology through its use of a mixed-methods design, various limitations arose during data collection. First, due to issues of participation sign-ups, missing data, student efficacy, and attrition rates, the sample size was small and the group sizes were not even. The control condition consisted of a much smaller group than the experimental condition. Fortunately, due to using a mixed methods design, the control group was just an additional group used to increase the internal validity of the study. The repeated measures portion of the design was the primary interest in the study. Unfortunately, the size of the control group required a more complex statistical method for comparing the two independent groups. This study required a limited population which contributed to the constraint of having a small sample size. The screening process to obtain a population that rates higher in terms of prejudice on the Anti-Muslim Prejudice Scale also creates a skewed population, but for the purposes of this intervention, this type of limited population was a necessity. Keeping this fact in mind, these results may not generalize to the general population even if the sample size was bigger.

There were minor differences between the sample collected in the fall semester and the sample collected in the spring semester. These differences may have arisen from events happening around the world (as previously discussed) as well as minor changes to the procedure. The original prequalification survey consisted of only the Anti-Muslim Prejudice Scale. However, after a few participants inquired about the qualification

process, I added filler questions focusing on a variety of minority groups on campus to reduce the likelihood of suspicion. Responses to these filler questions were not assessed or used as selection criteria. All qualification procedures remained the same.

The other differences consisted of a minor change in the lab sessions. At the beginning, the course selection question was asked to participants immediately following the audio recording task for both conditions in addition to the follow-up survey. After concern of this question possibly altering effects of the intervention by providing a route for dissonance reduction, the question was eliminated from the lab session survey but remained in the follow-up survey as planned. Due to the issue of a small sample size, after analyzing the data to ensure that the exposure to the question did not have a significant effect on the dependent variables, we included data from participants that received it in our general analyses.

In order to reduce any influence of possible practice effects, the time between the IAT administrations was spaced a week apart to avoid this limitation. Based on previous literature (Fujii et al., 2013), there is still a risk of practice effects (Falleti et al., 2006). In efforts to minimize this possibility, the week delay created another constraint: attrition. Despite requiring the completion of the follow-up survey for earning participation credit, there were still seven instances of attrition amongst the sample.

One last limitation of this study is the use of an IAT. There is a debate on the validity of these measures and a question of whether they are actually assessing what they are trying to measure. Some claim that IATs only assess the awareness of a stereotype rather than the active endorsement of it. On the other side of this argument, there are studies supporting their validity and reliability (Greenwald, Banaji, & Nosek, 2015;

Nosek, Greenwald, & Banaji, 2005; 2007)). While this may be a limitation in the eyes of some researchers, it is not in the eyes of others (Fazio, 1990; Greenwald, Banaji, & Nosek, 2015; Nosek, Greenwald, & Banaji, 2005; 2007; Nosek et al., 2007; Nosek & Hanson, 2008). The IAT's measure latency responses indicating implicit preferences. A racial preference can either indicate prejudice or be the first step towards such attitudes. While further research is needed to clear up this debate, the use of IATs is respected among the social psychological community. To assess this limitation, future replications should be performed to examine the reliability of the results produced in this study.

Conclusions

There are many anti-racism campaigns and social interventions found in today's society (e.g. "Racism, It Stops With Me"). However, with issues of racism found in newspapers daily, the effectiveness of these campaigns come into question. Research would suggest that they may even be unknowingly promoting as opposed to reducing racism because they are highlighting the regrettably frequent behavior of racism (Cialdini, 2006). If researchers assess which social interventions against racism are effective or even develop new ones with established validity, the likelihood of reducing prejudice may increase. It was the goal of this study to move away from less effective movements and towards a scientifically supported solution to the problem.

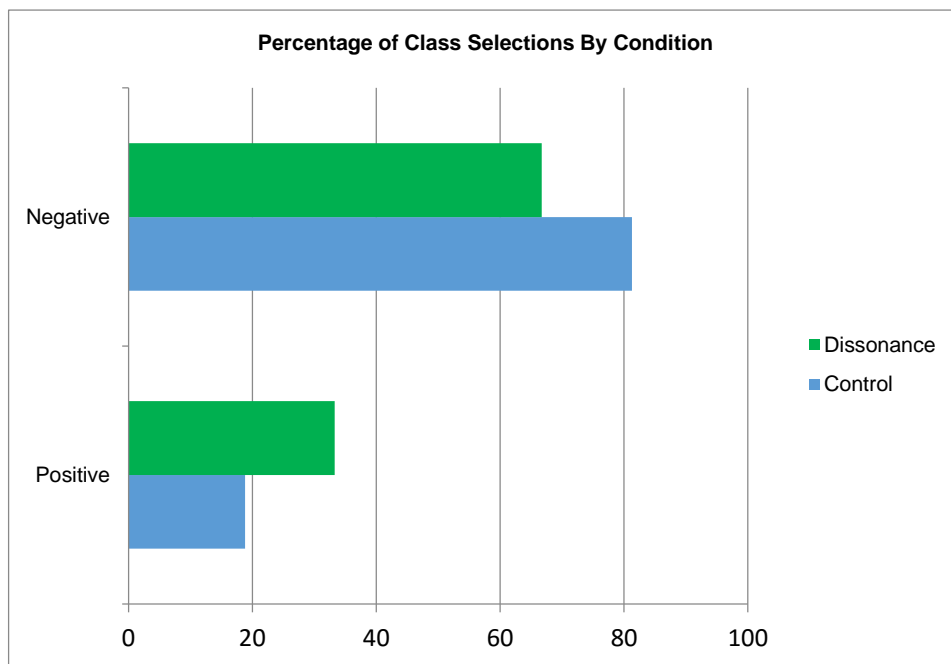


Figure 1. Percentage of stereotypical (i.e. negative) and counter-stereotypical (i.e. positive) class selections for each condition. This figure illustrates the trend of the increasing proportion of counter-stereotypical course selections from the dissonance group.

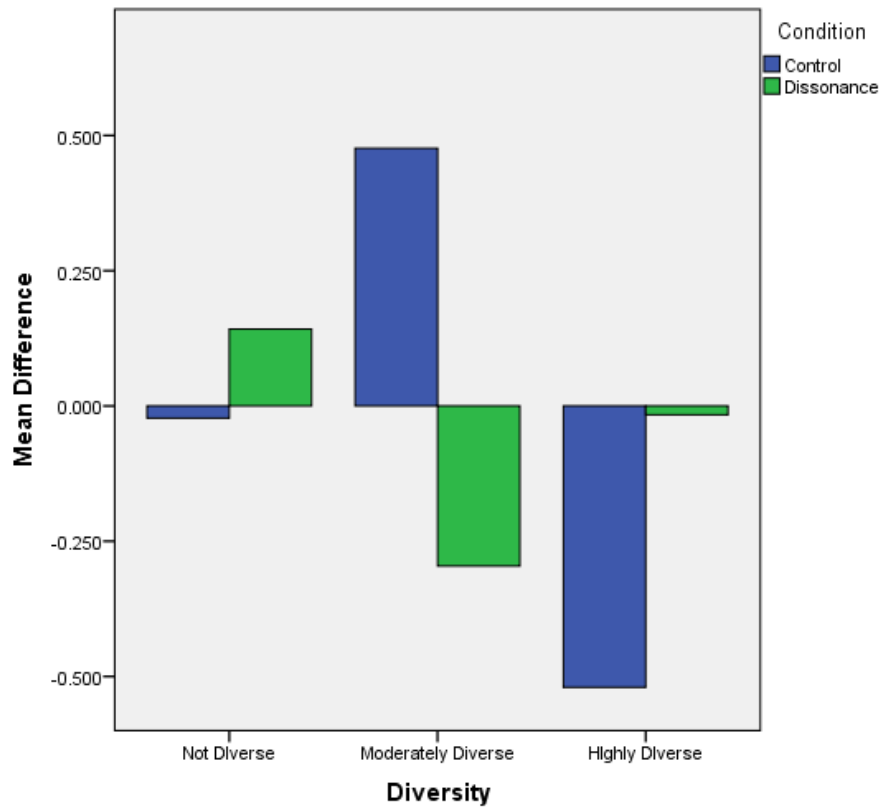


Figure 2. The difference in latency response between condition for each diversity group during the fall semester. Illustrated in the graph above, data collected from participants in the fall generally showed to trend in the direction of the hypothesis. On average, students exposed to the dissonance intervention decreased their latency response scores if they grew up in areas with moderate to high diversity.

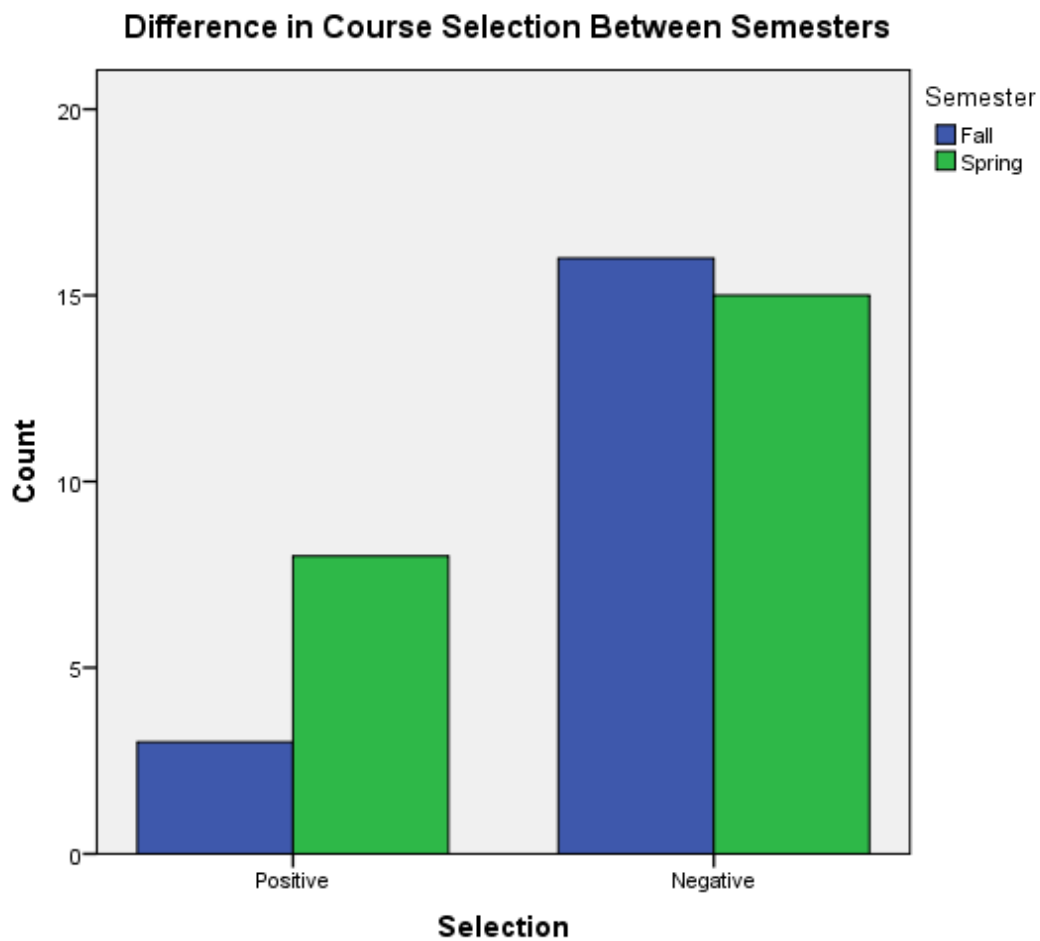


Figure 3. The difference in course selection by semester of data collection. The graph illustrates the response disparity for selecting stereotypical (i.e. negative) courses or counter-stereotypical (i.e. positive) courses from each semester.

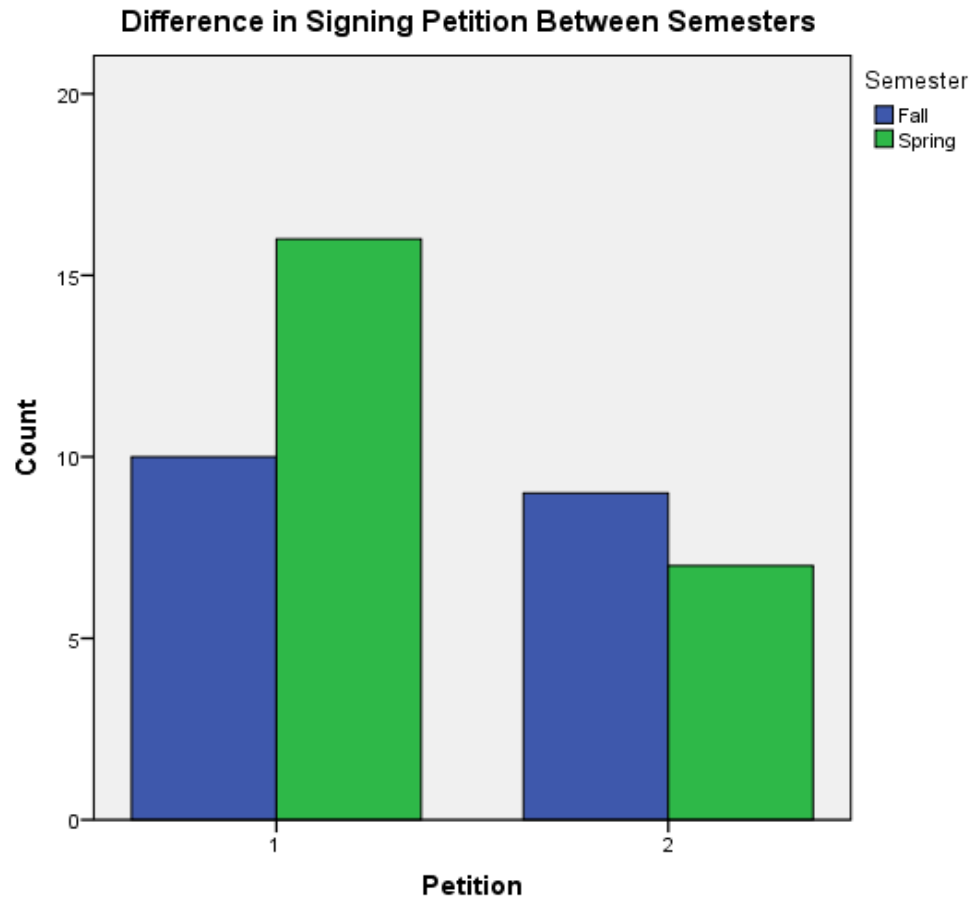


Figure 4. The difference in petition signature by semester of data collection. The graph illustrates the response disparity for signing the petition (indicated by "1") or not signing it (indicated by "2") from each semester.

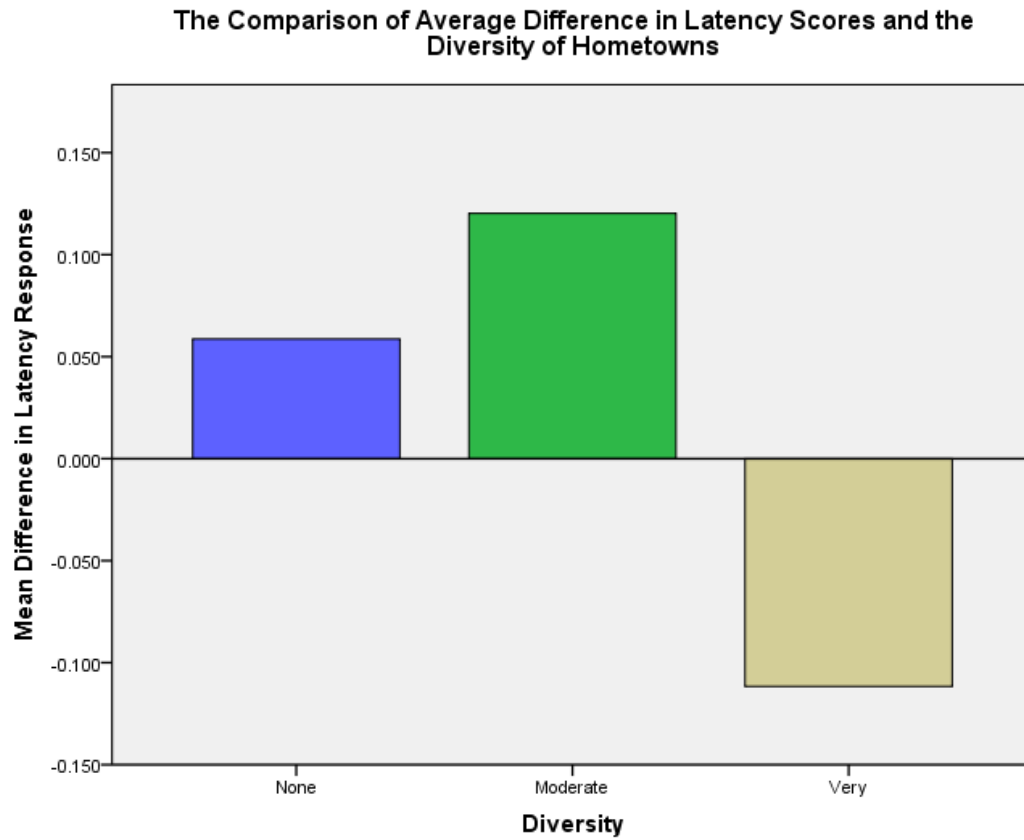


Figure 5. The difference in latency response scores from pretest and posttest between participants who grew up in homogeneous, moderate, and highly diverse areas. This graph indicates that on average, participants from very diverse areas decreased their latency response while participants from moderately diverse and homogenous areas increased their latency response.

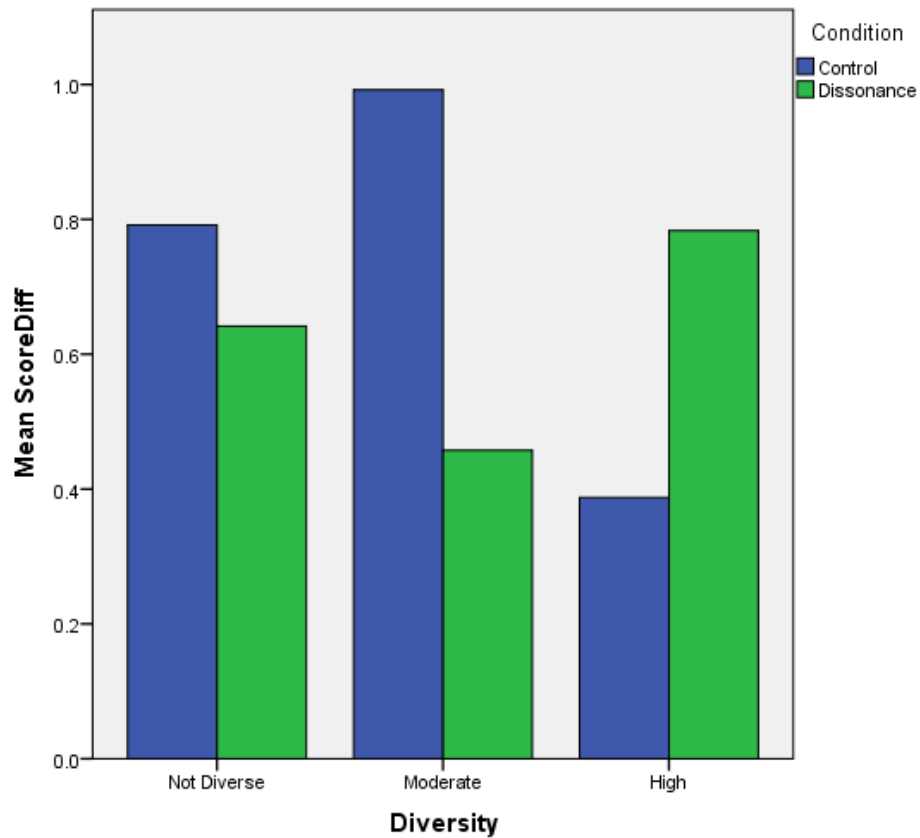


Figure 6. The average difference of the explicit prejudice pretest and posttest score based on condition and diversity of participants' hometown. The chart illustrates that on average, all participants increased their explicit prejudice score. Higher scores are interpreted as lower prejudice, therefore, both conditions significantly reduced their levels of explicit prejudice. Participants who were exposed to the intervention were more likely to increase their explicit score when they were from highly diverse areas.

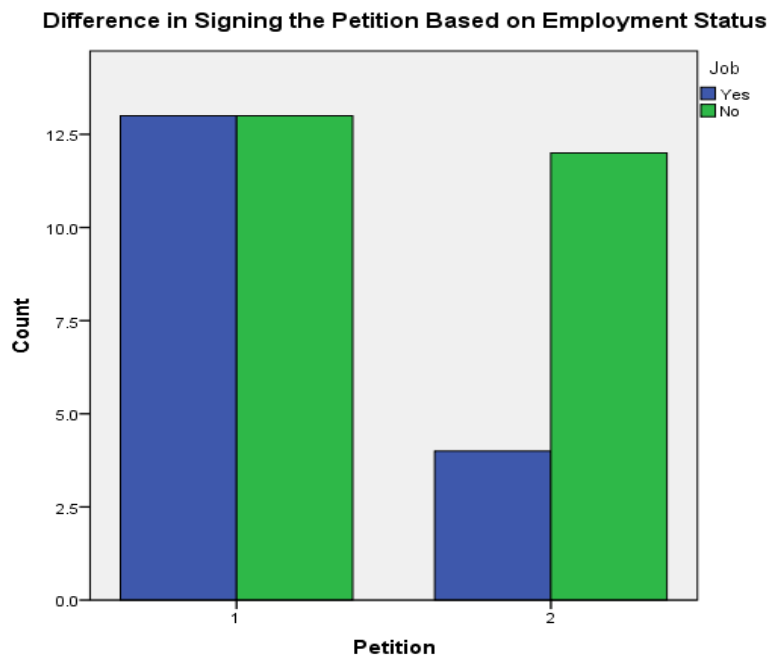


Figure 7. The comparison of participant employment and whether or not they signed the pro-Arab-Muslim petition. Students who were employed were significantly more likely to sign the pro-Arab-Muslim petition than those who were not employed ($\chi^2 (1) = 4.00, p = .046$). While 50% of the unemployed participants signed the petition, 81.3% of the employed participants signed the petition.

Appendix A

Prequalification Survey

Anti-Muslim Prejudice Scale (Ernst et al., 2003)

1. Islam is at least as tolerant and respectful of other faiths as most major religions are.
2. Muslims, as a rule, are more devious than other people.*
3. Islam, by its nature, is contrary to the American way of life.*
4. Islam promotes kindness and love toward all people.
5. Muslims are controlled too much by their irrational emotions.*
6. Muslims are very attentive to cleanliness and good grooming.
7. One must admit the traditional cloth headdress worn by many Muslims looks ridiculous.*
8. Muslims deserve great respect for their many cultural accomplishments.
9. Sad to say, when you get right down to it, Muslims are basically troublemakers.*
10. Muslims are at least as intelligent and well educated as others are.
11. Islam has had a very positive effect on the lives of many people.
12. Muslims are often more selfish and inconsiderate than others are.*
13. Overall, Muslims have made an important positive contribution to our society.
14. The basic teachings of Islam must be condemned as evil.*
15. When conflicts arise, Muslims are cowards and do not fight honorably.*
16. Compared with other people, Muslims are uncivilized and backward.*
17. Muslims show great respect for human rights and freedom.
18. Muslims lack the ability to think independently; they follow their leaders like sheep.*
19. The understanding that Muslims have of political issues is sophisticated and advanced.
20. Muslims cherish every human life.

Note. Every item was rated on a 9-point scale ranging from -4 (very strongly disagree) to 4 (very strongly agree) with the statement. * Scores from these statements were reverse-coded in Studies 2 and 3.

Perceptions of Greek members

1. All guys who join fraternities become “bros”.
2. Being a part of the Greek community simply means that you pay for your friends
3. Fraternities and sororities provide a lot of opportunities for service work and philanthropy.
4. Fraternities and sororities are responsible for the majority of the partying on campus.
5. Values set by the Greek community contribute to making JMU a better place.
6. People underestimate the advantages and positive aspects of Greek life when they act upon the stereotypes.
7. There are many advantages of being a member of a fraternities or sorority.

8. The stereotypes of fraternities and sororities are found to be true on JMU's campus.
9. Sorority girls are just as intelligent as girls who are not a member of Greek life.
10. Greek community members need to focus more on their academic and philanthropic goals and not their partying.
11. The only good thing about Greek life is the networking advantages.
12. The Greek community promotes kindness and love toward all people.

CSUN Attitudes Toward LGBTIQQ Issues (Masequesmay, 2007)

1. How comfortable are you interacting in person with the following people? Please choose the level of comfortableness. Please answer honestly to the best of your knowledge. We are interested in your personal view and there are no correct or wrong answers to these questions.
 - Gay men (men who are emotionally and sexually attracted to other men)
 - Lesbian women (women who are emotionally and sexually attracted to other women)
 - Bisexual men (men who are emotionally and sexually attracted to both men and women)
 - Bisexual women (women who are emotionally and sexually attracted to both men and women) Female-to-male transgender/transsexual people (feeling born in the wrong body and should have been born male and actively changing his appearance to match his gender identity)
 - Male-to-female transgender/transsexual people (feeling born in the wrong body and should have been born female and actively changing her appearance to match her gender identity)
 - Intersexual people (a person born with both genital male and female characteristics, ambiguous genitalia, or sex chromosomal makeup of XXX, XYY, XXY, YY, or X)
 - Androgynous-looking people (a person whose gender is ambiguous to you; you can't tell if the person is a he or a she)
2. Please select the degree to which you agree or disagree with the following general statements about LGBT (lesbian, gay, bisexual, and transgender) people.
 - LGBT people's sexual acts or gender expressions are against what the Creator or God intended.
 - LGBT people are unnatural.
 - LGBT people are mentally sick or never grew up to be mature heterosexual men and women.

- LGBT people are sexual and gender perverts.
 - Intersexual people are nature's mistakes.
 - Homosexuality, bisexuality, and transgenderism are a result of too much freedom in a country that is losing traditional family values.
3. Please select the degree to which you agree or disagree with the following statements about origins of sexuality and gender. Please note that this is about your personal opinion, and there is no correct or wrong answer.
 - One is born homosexual, straight, or bisexual.
 - Homosexual people can become heterosexual.
 - Bisexuality is a choice.
 - One is born transgender.
 - Transgender people choose to be transgender.
 4. Please select the degree to which you agree or disagree with the following statements about issues pertaining to LGBTI people (LGBTI refers to lesbian, gay, bisexual, transgender, and intersexual)
 - Marriage should only be between a man and a woman.
 - There are public areas or occupations where homosexual and bisexual people should be excluded (e.g., not allowed to teach young children in public schools).
 - There are public areas or occupations where transgender people should be excluded (e.g., not be allowed to serve in the military).
 - LGBTI couples should have the right to adopt children.
 - Students should be exposed to age-appropriate lessons about LGBT historic figures in their history and social science courses.
 - Parents of students taking sex education should have the options to allow these students to learn about heterosexuality, homosexuality, and/or transgenderism.
 - Students should be taught about tolerance/acceptance of LGBTI people to reduce bullying and suicides among youth.

Perceptions of Student-Athletes

1. Student-athletes provide positive leadership and act as role models on campus.
2. AT JMU, the "dumb jock" stereotype is both prevalent and true.
3. Participation in sports provides students with good time-management skills.
4. JMU should stay away from becoming a D1-single A school.
5. I admire the ability of students who can dedicate so much time travelling and practicing while taking a full course load.

6. Student-athletes get away with more because they are held to a different of standard than non-athletes.
7. Participation in sports hinders academic performance.
8. University sports creates a since of school spirit promoting a close-knit community.
9. JMU should not grant scholarships for sports, but only academic excellence.
10. Professors remain fair in their grading and leniency when it comes to both athlete and non-athlete students.

Appendix B

Virginia mosques vandalized; area Muslim leaders call for calm

By Pamela Constable and Tara Bahrapour September 15, 2012

Ever since the first mosque opened in Harrisonburg, Va., 14 years ago, the immigrants from Pakistan, Iraq and other countries who worship there say they have felt welcomed in the rural college town. They participate in local food banks and shelter programs, have close relations with local churches and often receive non-Muslim visitors at their weekly prayer services.

So on Friday, worshipers were shocked when they arrived at the mosque to find graffiti scrawled on the building, including obscene and racial insults against “Irakis” and a warning: “This is America,” followed by another slur. Some speculated that the sudden harassment must have sprung from the anti-American violence that has swept the Middle East over a vulgar anti-Muslim video made in the United States.

“Nothing like this has ever happened to us before, even after 9/11,” said Ehsan Ahmed, a director of the Islamic Center of Harrisonburg mosque and an economics professor at nearby James Madison University. “We have always been welcomed here, and we participate in many community activities. We can’t say what their motive was, but the timing is very coincidental.”

On Saturday morning, members of the Dar al Hijrah Mosque in Falls Church emerged from an early prayer service to find that someone had smashed the windows of about 30 cars parked on neighborhood streets. No written slogans were left, but mosque officials initially thought the vandalism was directed at them.

Later in the afternoon, a Fairfax County police spokeswoman said the incident was a “random act of vandalism” that was scattered over a widespread area and that “the mosque was not at all the target.”

Over the past several days, Muslim leaders in the Washington area and across the nation have rushed to denounce the vulgar video and the anti-American violence it has provoked.

American Muslim immigrants have taken the furor in stride, saying they refuse to be provoked or exploited by extremist forces on either side.

In Harrisonburg, members of the vandalized mosque said they were immediately bolstered by sympathetic support from the community. A city council member hastily set up a Web site called “We are all Harrisonburg” and invited residents to attend a solidarity meeting at the mosque Sunday. More than 500 people signed up.

“This incident has given people an opportunity to reach out and get to know their neighbors, to build something positive from it,” said Kai Degner, the council member and a real estate agent. “Our city is growing and changing and becoming more diverse, with 57 languages in our schools. Change can require adjustment, but we have had no horror stories here.”

Mohammed Aslam Afridi, a Pakistani-born veterinarian who is president of the mosque, said he was sure the graffiti was connected to recent events elsewhere. “This anti-Islamic video has stirred people up, and so has the attack on the Sikh temple in Wisconsin,” he said. “People are angry and upset. But we are all children of Adam. This is my Harrisonburg, my Virginia and my country.”

Leaders of other mosques and Muslim organizations have been working overtime all week to call for calm and to make sure the provocative video, which portrays the Prophet Mohammed as a salacious thug, does not create new tensions or clashes for their communities. An estimated 5 million foreign-origin Muslims reside, work or study in the United States.

On Friday, Imam Mohamed Magid told worshipers at the All Dulles American Muslim Society, a large and influential mosque in Sterling, not to allow the provocative video — believed to have been made and promoted by a few extremist Coptic Christian immigrants from Egypt — to undermine the image of their faith community and damage the relationship between the United States and the Islamic world.

“We should not fall into the trap of people who want to portray Muslims as violent people,” Magid told the congregation. “We should not express our anger with violence and breaking things and taking innocent people’s lives,” Magid said. Instead, he called on Muslims to combat bigotry with education. He also paid tribute to the U.S. ambassador to Libya who died Tuesday in an assault on the U.S. Consulate there.

Leaders at Dar al-Hijrah joined a news conference Wednesday condemning anti-American violence in Libya and Egypt and later went to a prayer vigil in front of the White House. Residents in the surrounding neighborhood expressed surprise and concern when they heard about the vandalism.

“Oh, dear. I was worried something like this would happen,” said Kathleen Kline Moore, pastor of the First Christian Church of Falls Church, one block away. “These people are our friends, and we always let them park in our church lot on Fridays. We support them and we absolutely deplore what has happened to them.”

On Saturday, the Washington-based Council on American Islamic Relations issued a video appeal in Arabic by its executive director, Nihad Awad, asking Muslims not to blame the U.S. government for the video.

Awad and Magid said they had given numerous interviews this week in an effort to calm tensions and counteract misinformation about the video. On Friday, Awad participated in a debate on an Egyptian satellite news channel with organizers of the protests there.

Among many Muslim immigrants in the Washington region, there was a similar expression of revulsion against the video and horror at the convulsive violence that swept the Middle East in response. Several said they feared that the episode would revive the kind of suspicion and hostility that affected their communities after the Sept. 11, 2001, terrorist attacks. Others said the inflammatory video should have been taken off YouTube and other Internet sites where millions of Muslims could see it.

“Both sides are wrong. The video was disgusting, and the violence was totally wrong,” said Zahid Mughal, 38, a Pakistani American who runs a gas station in Arlington County. “Any fool can put a video on YouTube, and by reacting so violently, you just give the extremists what they want.”

Appendix C

Course Selection Survey

The university administration is interested in offering more courses on Islam and the Middle East for both students in the Middle Eastern Studies minor and students with general interest in the subject. They have asked us to gauge interest among students not in the minor in order to provide courses that will attract students of all majors.

Please select three courses from the list below that you would be most likely to enroll in:

1. Inventions with Arabic Origins
2. Female Oppression in the Middle East
3. Peace in the Middle East
4. Jihad in the Quran
5. Scientific Advances from the Muslim World
6. The Fight for Jerusalem: A War Between Islam and Judaism
7. Violence and Conflict in the Middle East
8. The Rise of the Taliban
9. The Middle East: The Savior of Classical Intellect
10. Romanticism in the Middle East

Appendix D
Follow-up Survey

Where did you grow up?

How diverse would you consider where you grew up?

Very diverse, Moderately diverse, Not diverse

How many Arab-Muslims do you personally know? (If you know more than 30, please select the maximum (30) on the scale)

0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30

Demographic Information

Year in School:

Major:

Age:

Gender:

Race/Ethnicity:

Job:

Hours of work a week:

Religion:

Military Experience: Yes/No

Military in immediate family: Yes/No

Political Affiliation:

Republican/ Democrat/ Independent/ Socialist/ Communist/ Green/ Libertarian/ Other

Appendix E

Follow-up Article and Petition

Irving Texas Has a Problem with Muslims: Apologize to 14 Year Old Clock Maker Ahmed Mohamed and Address Your Racism

Found on: <http://www.thepetitionsite.com/540/438/055/irving-texas-has-a-problem-with-muslims-apologize-to-14-year-old-clock-maker-ahmed-mohamed/>

9th grade student Ahmed Mohamed's arrest for bringing a homemade clock to school has enflamed the internet, and with good reason. It is outrageous that Ahmed's interest in science and robotics landed him in a juvenile detention facility.

The only possible explanation for the behavior of both the school and the police department is that he was profiled for his name, race and his family's faith. When Ahmed was pulled out of class by the principal, a police officer who had never met Ahmed reportedly said, "Yup. That's who I thought it was."

While the police have dropped any charges, they still maintain that they were correct to respond as they did, and that Ahmed's "hoax bomb" was the problem, not their Islamophobic reaction.

The school district and police department's leadership must apologize to Ahmed, his family and the Muslim community immediately. Beyond this obvious step, they must expunge this horrible event from Ahmed's record, and commit school and police leadership to racism and sensitivity training to address their demonstrated biases.

Irving has a troubling pattern of strained relations with the Muslim community - Mayor Beth Van Duyne has accused Muslims in Irving of "bypassing American courts" and the City Council has voted to support legislation that the Muslim community claims is anti-Muslim.

This outrageous event only underscores that Irving leaders must do far more to create an inclusive community free from profiling and discrimination. To start, they must apologize to Ahmed, his family, and the Muslim community, and ensure this event is expunged from this promising student's record.

Once that occurs, school and police officials must undertake race and sensitivity training to address their clear biases.

"The outrageous actions surrounding 9th grader Ahmed Mohamed reflect horribly on your school and police leadership. You must apologize to Ahmed, his family and the Muslim community immediately. Beyond this obvious step, you must expunge this

horrible event from Ahmed's record, and commit school and police leadership to racism and sensitivity training to address your clear biases."

If you would like to sign this petition, please type your name in the space below:

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