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## RESPONSE TO SEPTEMBER 11: ANXIETY, PATRIOTISM, AND PREJUDICE IN THE AFTERMATH OF TERROR

Chris L. Coryn  
Western Michigan University

James M. Beale  
University of Texas, Brownsville

Krista M. Myers  
Indiana University, South Bend

### ABSTRACT

*In this study our P211 Methods of Experimental Psychology students and research team specifically examined feelings of personal anxiety created by terrorist attacks and ongoing conflict with the Middle East, patriotic attachment towards the United States, and subtle and blatant prejudicial attitudes toward Arabic people following the events of September 11, 2001. The design, hypotheses, instrument selection, data collection, and analyses for this study were conducted by our students as a course learning tool. Our students developed three distinct hypotheses and conducted analysis of these hypotheses, with minimal assistance from our research team. Three hundred-one (174 female, 127 male) students at Indiana University South Bend completed questionnaires for our study, measuring levels of anxiety, patriotism, prejudice, and a variety of sociodemographic factors. Four periods of data collection were completed during a period of 19 months following the events of September 11, 2001. Hypotheses developed by our students were tested using multivariate analysis of variance (MANOVA) techniques. As predicted, anxiety producing events (periods 1 and 4 combined) coincided with greater patriotic attachment toward the United States and amplified prejudicial attitudes toward the target group; Arabic people. No significant differences were found for either gender or our experimental condition (support versus protest).*

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### INTRODUCTION

The attacks on the World Trade Center and the Pentagon (and in the fields of Pennsylvania) on September 11th, 2001 exposed the United States to terrorism on an unprecedented scale, the first large-scale terrorist incident in the nation since the bombing of the Murrah Federal Building in Oklahoma City in 1995 (Ruby, 2002). In the aftermath of these attacks, many feelings have surfaced: fear of the reoccurrence of terrorism, sadness for the losses of the country, stronger patriotic and nationalistic attachments, anger at the people who planned such an attack, thankfulness for not losing a loved one, fear of and prejudice toward foreigners, and the desire for revenge (Freyd, 2002; PEW, 2001; PEW, 2002a). Within hours of the events of September 11th American flags appeared on car antennas and door steps (Gerstenfeld, 2002). Shortly thereafter the first reports of hate crimes against Muslims and others of Middle Eastern descent began to trickle in (Gerstenfeld, 2002; Ibish, 2001).

While government policy makers have taken actions to help prevent further attacks, researchers have sought to better understand the psychological impacts of such events (Freyd, 2002; Kanihan & Gale, 2003; Ruby, 2002; Silver, Holman, McIntosh, Poulin, & Gil-Rivas, 2002; Ursano, 2002). These events had wide ranging implications such as the eventual war in Iraq, policies (e.g., the PATRIOT Act) meant to protect the occurrence of similar events in the future, and attitudinal shifts toward national out-groups (PEW, 2001).

In a nearly consensual desire for vengeance, more than 85% of Americans supported military action against terrorism in the Middle East in a 2002 survey (PEW, 2002a) and polls indicated a majority of Americans supported war even if it means there would be American casualties (Newport, 2001). Among those who say war is never morally justified, more than half (55%) supported the war on terrorism and preservation of national security interest (PEW, 2001). Many countries believed that U. S. desire to control Iraqi oil was the principal reason that Washington waged a war against Iraq. In Russia, 76% subscribed to a war-for-oil view, as did 75% of the French, 54% of Germans, and 44% of the British (PEW, 2002a). In sharp contrast, just 22% of Americans saw U. S. policy toward Iraq driven by oil interests. Two-thirds of Americans believed that the United States was motivated by a concern about the security threat posed by Saddam Hussein.

In a large opinion study conducted after the September 11, 2001 terrorist attacks on the Pentagon and World Trade Center, the PEW Global Attitudes Project (2002a) reported that Americans held increasingly stronger internationalist views, believing that the United States should actively intervene in international affairs. Many Americans believed that their values, beliefs, and ideologies should be imposed upon other nations, countries, and cultures. American values and beliefs are *right*, and other systems are *wrong*. Furthermore, in a global sample the PEW Global Attitudes Project (2002b) reported that since 2000 there has been growing discontent and declining favoritism with the United States in 19 of 27 countries in which data are available.

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## **Anxiety Following Impacting Events**

The September 11th attacks have offered the opportunity to evaluate levels of distress, coping strategies, and collective loss (Wayment & Cordova, 2003) following a major traumatic event. In a national study, Silver et al. (2002) examined levels of anxiety about the possibility of future terrorist attacks through measures of coping strategies and stress symptoms. Within one month of the attacks, 81.9% of respondents reported anxiety about future attacks; two months after the attacks, 64.6% reported anxiety, and six months after the attacks, while concern about future attacks was declining, 37.5% still reported anxiety.

In the months following September 11th, 2001, Silver, et al. (2002) found high levels of posttraumatic stress symptoms, with 12.4% of those surveyed experiencing symptoms within one month, 17% at 2 months after, and 5.8% of participants were still being affected at elevated levels after 6 months. More specifically, Kanihan and Gale (2003) found that those who were surveyed between 48 and 72 hours after the attacks were significantly more affected than those surveyed later, and that women were significantly more emotionally unsettled than men with regards to the terrorist attacks. These findings are consistent with those of Slone (2000) in which controlled exposure to media coverage of terrorist attacks leads to heightened feelings of anxiety among Israeli adults. Similar findings (Ursano, 2002) found that almost half (44%) of respondents reported having one or more symptoms of significant stress during the week following September 11.

Yin (2002) compared the terrorist attacks of September 11, 2001 to the assassination of John F. Kennedy in November 1963, with respect to how each event influenced levels of anxiety of the American people. Telephone interviews were conducted from a national sample two days after the September 11th attacks and with a sample of New York City residents within one week of the attacks. The results were then compared to a similar study conducted a week after the assassination of JFK. People after both disastrous events either did not continue with their daily activities, or if they did, found it difficult. More Americans were angry following the terrorist attacks of September 11th than after the assassination of JFK, and this anger was intensified in New York. However, in 1963 more Americans reported nervousness, loss of appetite, rapid heartbeat, and smoking more than usual than in 2001. However, more people in 2001 reported having trouble sleeping, crying, and losing their temper more often than usual than in 1963.

Slone (2000) explored the connection between media presentations and anxiety in relation to Israeli adults. Presenting information either on terrorist attacks on the country or mundane news clips about general news topics in the country she found strong support for her hypothesis that the group exposed to media reports on terrorism would experience higher levels of anxiety. She found that religious participants were more anxious than secular participants, and that women reported higher levels of anxiety than men. Her research provided support for mass media presentations of terrorism impacting personal levels of anxiety, as well as proposing that gender and religion may also be factors in predicting increased levels of anxiety.

### **Patriotic and Nationalistic Attachments**

Patriotic attachment to the nation is dominated in the psychological literature by two terms: nationalism and patriotism. Nationalism (Worchel & Coutant, 1997) has been defined as an attachment to a nation characterized by a desire to enhance national superiority of power *vis à vis*

other nations. Kelman (1997) defined national identity as the group definition of itself as a group, its conception of its enduring characteristics and basic values, its strengths and weaknesses, its hopes and fears, its reputations and conditions of existence, its institutions and traditions, its past histories, current purposes, and future prospects. Patriotism, on the other hand, is an ideology, or set of attitudes and beliefs, that refers to individual attachment and loyalty to their nation and country.

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Historically, the two concepts have been used interchangeably, suggesting little distinction between them (Feshbach, 1987). As conflict arises, particularly of the international sort, patriotic and nationalistic attachment is heightened (Feshbach, 1987).

Empirical research on American patriotism and nationalism (Pena & Sidanius, 2002) has found that majority ethnic groups that are dominant tend to be more patriotic than minority ethnic groups. Among Whites, higher United States patriotism was associated with stronger feelings of in-group dominance, while for Hispanics and Latinos the relationship was reversed. These findings suggested that patriotism toward the United States means different things to members of different ethnic groups, and while Whites feel the United States is *their* country, minorities may not hold such feelings and patriotism among these groups is lower. Furthermore, research has found that patriotic attachment to the United States is associated with feelings of out-group prejudice and discrimination (Coryn, 2003; Kashti 1996; Kelman, 1996). These findings coincide with the studies of Mummendey, Klink, and Brown (2001) which reported that students in Germany and Great Britain who viewed themselves as part of the national in-group had a strong national identification and a negative view of the out-group.

Qualitative research (Coryn, 2004) has found that Americans having strong patriotic and nationalistic attachment to their country are more likely to exclude Arabs and other people of Middle Eastern descent from their scope of justice (i.e., the moral community). Americans holding these sentiments (i.e., hostile national identities) believed that Arabs did not deserve fair, just treatment, nor were they entitled to resources. Furthermore, in many instances, Americans reported that they would not help Arab American citizens, associating them with the terrorists of September 11th, despite the fact that they too were American.

### **Prejudice toward the Perceived Perpetrators**

One plausible explanation for out-group hostility directed toward those perceived as being closely, or even loosely, associated with the terrorist attacks of September 11th, at the group level, is the protection of national image in the presence of external threat (Feshbach, 1987; Feshbach, 1990). Although the motivation to protect and enhance the social and national group through negative evaluations of out-groups, as proposed by Social Identity Theory (Tajfel, 1982; Tajfel & Turner, 1988), is unquestionably powerful, some Americans pleaded for racial tolerance and condemned acts of discrimination directed toward Muslims and others of Middle Eastern descent- in sharp contrast to the hostility expressed by some Americans (Dart, 2001 as cited in Reed & Aquino, 2003).

Many Americans have openly criticized acts of discrimination and some have gone so far as to provide comfort and protection for their fellow citizens of Middle Eastern descent. For example, following the vandalization of one suburban mosque, a group of concerned Americans volunteered (at considerable personal risk) to accompany Islamic women to the grocery store, to medical appointments, or on other errands after discovering that these women were frightened to venture out in public (Dart, 2001 as cited in Reed & Aquino, 2003). Reed and Aquino (2003) explained these helping behaviors by theorizing that those who were willing to help had an expanded sense of a moral self. The research of Reed and Aquino (2003) of out-group aid and relief efforts toward social out-groups, Afghani refugees, also found that participants reporting higher self-importance on moral identity were more likely to support relief efforts. Persons placing lower self-importance on moral identity were less likely to support aid and relief efforts. In a second study Reed and Aquino (2003) found that when persons were given the choice to select aiding either a deserving social in-group (New York Police and Fire Widows Benefit Fund) or a deserving social out-group (Afghani women and children) people with higher levels of moral identity were more likely to assist the social out-group. These findings suggest that although some persons express negative reactions toward social out-groups that are associated with an inter-group conflict, other people are able to expand their scope of justice to include the out-group even to those held responsible for causing harm to the in-group.

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While previous studies (Silver, et al., 1997; Yin, 2002; Ursano, 2002; Slone, 2000; Kinzie, et al., 2002; Schlenger, et al., 2002) have dealt mainly with anxiety in relation to terrorist events, another effect from the September 11th attacks may be increased levels of prejudice against the group of people who were the perpetrators of the terrorism. Bar-Tal and Labin (2001) examined how a major event, a terrorist attack in this case, affected the stereotypes towards groups involved in the event. It was confirmed that Israelis perceived Jordanians more positively than Palestinians and Arabs. While this study used a foreign sample, the circumstances were notably similar, which supports the belief that people become more prejudice towards the perpetrators of terrorist attacks.

The link between prejudice and authoritarian attitudes (Johnson, 1992; Schlachter & Duckitt, 2002) has been examined by associating naivety about a particular culture or religion with prejudicial attitudes towards that culture or religion. In a study that examined the level of knowledge a group of teachers had about Islam, Mastrilli and Sardo-Brown (2002) found that while a relatively low percentage of people in the group had much knowledge about Islam, one third of the group associated the word Islam with terrorists, enemy, trouble, war, Osama Bin Laden, and unfair treatment of women. Sergent and Woods (1992) used two forms of the same survey, one describing a situation involving an Arabic person and the other describing the exact same situation involving a racially ambiguous person, and found that attitudes were significantly more negative when the situation involved an Arab than when the situation involved a racially ambiguous person. The researchers also found that suspicion, tension, hatred, indifference, sadness, fear, discomfort, hate, shock, lack of safety, tension and anger were commonly associated with a number of hypothetical situations involving Arabs.

A meta-analysis compiled by Montieth and Winters (2002) about discrimination specifically related to the September 11th attacks and how people of Arab descent had been treated in the following months discovered that in the five months following the attacks more than 1,700 incidents of violence against Muslims were reported.

The impact of media influence on anti-Arabic sentiment (Khalema & Wannas-Jones, 2003), is unquestionably powerful. It was found that the use of anti-Islam terminology in media presentations further supported the negative portrayal of Muslims and fueled the common misconception that all Muslims are terrorists.

## **HYPOTHESES**

We postulated three primary hypotheses for our study: (1) increased threat would coincide with increases in anxiety, patriotic attachment, and prejudice toward Arabic people, (2) participants in the support condition would report lower levels of anxiety and lower levels of prejudice toward Arabic people, and (3) women would report higher levels of anxiety, but lower levels of patriotism and prejudice toward Arabs than men.

These hypotheses were developed by our P211 Experimental Methods students, with minimal input from our research team. For example, hypothesis 3 was included to demonstrate an experimental manipulation (a requirement of the project) to our students. As such, our students were interested in examining the extent to which information that was consistent with either negative (protest) or positive (support) stereotypes of Arabic people could influence judgments on the three major scales (Prejudice, Patriotism, and Anxiety). Recent research reported in CRISP supports these contentions (Dambrun, Després, & Guimond, 2003). Furthermore, Khalema and Wannas-Jones (2003) found that media representations of events are frequently taken as fact. Participants also believed that the media is negatively biased in reported events that have to do with Arabs or Middle Eastern countries, thus further biasing those who read their stories or watch their news reports. Our research was designed to discover if media portrayal influenced participants views and in order to do so, randomly assigned participants to view either a picture implying support or criticism of President Bush and American presence in Iraq.

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To support their hypotheses, our students reviewed the appropriate literature and concluded that their hypotheses were tenable. For example, previous studies have explored possible increased patriotism from dominant groups (Pena & Sidanius, 2002) as well as possible increased anxiety after traumatic events (Silver et al., 2002). Moreover, Slone (2002) suggested that media presentations of terrorism might also increase levels of anxiety, particularly in women and religious persons. While none of the aforementioned studies examined a possible link between increased anxiety and prejudice towards anyone sharing the nationality or religion of the terrorist and rising levels of patriotism when terrorist attacks occur, we suggest that those who have been exposed to terrorism could be experiencing these profound affects collectively. Our study looked to investigate the affects of anxiety, patriotism and prejudice together in the months following the events of September 11th.

## METHODS

### Participants

Our participants for this study were undergraduate students ( $N = 301$ ; 174 female and 127 male) enrolled in P103 Introductory Psychology courses at Indiana University South Bend. Participants received research participation credit for taking part in our study. A total of 302 students completed questionnaires as part of our study; 1 participant failed to complete all items on at least one of the three major scales and the data from this participant was removed from all analyses.

### Materials

Our questionnaire for the study, in order of its contents, included scales for measuring Patriotism, Prejudice, and Anxiety, as well as set of sociodemographic measures. Items for the three primary scales were adapted from existing measures.

Following a brief set of instructions on page 1, the second page of our questionnaire contained a picture of a smiling Arabic Muslim man holding a poster of George W. Bush. The purpose of this image was two-fold: to help place our participants in the mindset of Arab-American relations and to provide an independent variable manipulation (for our class purposes). Beneath this picture was a caption stating that the photo was taken in Pakistan at either a rally in support of or protest against U.S. involvement in the region.

The next four pages of our questionnaire contained the three scales measuring prejudice, patriotism and anxiety. Items on all three scales were comprised of a series of statements with a six-point Likert scale format from 1 (strongly agree) to 6 (strongly disagree). Sociodemographic data (e.g., gender, age, religious affiliation) was then collected on the last page.

#### *Blatant and Subtle Prejudice Scales*

Prejudice was measured using a 19 items overall: a ten-item blatant prejudice scale and a nine-item subtle prejudice scale. Originally designed to measure prejudice among British people of individuals from the West Indies, these scales were adapted directly from Pettigrew and Meeterns (1995) by substituting British with American and West Indian or people from the West Indies with Arab or Arabic people. The maximum possible range was 10 to 60 on the BPS and 9 to 51 on the SPS. Blatant and subtle prejudice scores were aggregated to produce a total prejudice rating of 19 to 111. The blatant and subtle prejudice scales can be found in Appendix A.

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#### *Patriotism*



Levels of patriotism were measured using the Kosterman and Feshbach (1989) 12-item patriotism scale (see Appendix B). Emphasis was added to negatively scored items by putting the word *not* in bold face to stress their importance in responding to the statement. All of the items made statements about patriotism in regards to feelings about the flag, country pledge of allegiance or countrymen. The maximum possible range for the twelve statements of this scale was 12 to 72. The patriotism scale can be found in Appendix B.

### *Impact of Events Scale*

Anxiety was measured with the widely used Impact of Events Scale (Horowitz, Wilner, & Alvarez; 1979). This scale measures levels of anxiety with respect to some traumatic event (e.g., rape) during the past seven days. For this study, we indicated *terrorist attacks* as the potentially distressing event. The scale includes items that make statements about feelings, sleeplessness, memories and other general cues of anxiety. The maximum possible range for the twenty-two statements of this scale was 22 to 132. The Impact of Events Scale can be found in Appendix C.

## **Procedure**

### *General Procedures*

The data for our study was collected over four separate periods during the 19 months following the attacks of September 11th, 2001, with each period occurring from 3 to 16 days. Data collection for period 1 took place from October 4 through 6, 2001 to assess attitudes in the aftermath of the events of September 11th, period 2 occurred from September 11 through 15, 2002, period 3 data were collected between January 27 and February 11, 2003, and data was collected for period 4 from March 24 to April 7, 2003- just after the beginning of offensive military operations in the 2nd Gulf War.

Questionnaires in the Protest and Support conditions were randomized prior to data collection for each round utilizing a random number table. After reading and signing an Informed Consent form, each of our participants were given a questionnaire booklet to complete. Our participants were generally able to complete the all items in their booklet within 10 to 15 minutes.

## **RESULTS**

### **Scale Validation**

Internal reliabilities of the primary instruments were analyzed using Cronbach's index of internal consistency for the sample ( $N = 301$ ); the Blatant Prejudice Scale ( $\alpha = .90$ ), the Subtle Prejudice Scale ( $\alpha = .82$ ), the Patriotism Scale ( $\alpha = .92$ ), and the Impact of Events Scale-anxiety- ( $\alpha = .95$ ) were all above the adequate range for internal reliability.

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### **Indicators of Anxiety**



In order to operationalize anxiety we monitored U. S. Department of Homeland Security Threat Advisories (U. S. Department of Homeland Security, 2001-2003) to develop and ascertain indicators of prospective anxiety. Threat advisories were collected daily for one week prior to and during phases of data collection in order to determine the salience of security risks and anxiety derived from government warnings. Threat advisories were recorded in Likert-scale format from 1 (low risk of terrorist attack) to 5 (severe risk of terrorist attack). The observations of threat advisories ( $N = 65$ ) were as follows: period 1 for data collection from October 4 through October 6, 2002 ( $N = 10$ ), for period 2 from September 11 through September 15, 2002 ( $N = 12$ ), for period 3 from January 27 through February 11, 2003 ( $N = 22$ ), and for period 4 from March 24 through April 7, 2003 ( $N = 21$ ). Table 1 illustrates the threat level and the period of time associated with the threat advisory.

**Table 1: Means and Standard Deviations for Threats of Terrorism**

	<i>M</i>	<i>SD</i>
Period 1	3.70	0.67
Period 2	2.83	0.39
Period 3	3.00	0.53
Period 4	4.10	0.44

Therefore, we rated period 1 as high anxiety producing (high risk of terrorist attacks), period 2 and period 3 as moderate anxiety producing (elevated risk of terrorist attacks), and period 4 was rated as very high anxiety producing (severe risk of terrorist attacks). For purposes of testing our first hypotheses it was determined that periods 1 and 4 and periods 2 and 3 would be aggregated in order to ascertain any differences between the levels of anxiety associated with these periods of time.

### **Descriptive Findings**

The means and standard deviations for our overall sample ( $N = 301$ ) on all five dependent variables are summarized in Table 2. The correlation matrix for the five dependent variables across all four periods can be found in Appendix D.

**Table 2: Overall Means and Standard Deviations**

	<i>M</i>	<i>SD</i>
Blatant Prejudice	27.77	10.72
Subtle Prejudice	36.25	08.09

Total Prejudice	64.02	17.34
Patriotism	60.78	09.90
Anxiety	57.03	23.22

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### Multivariate Analysis

Due to the number of dependent variables, five in all, multiple analysis of variance (MANOVA) was selected as the appropriate analytical strategy to examine our hypotheses, and simultaneously control for alpha inflation. This was the case for all of our analyses.

Our first hypothesis - increased threat (see Indicators of Anxiety) would coincide with increases in anxiety, patriotic attachment, and prejudice (blatant, subtle, and total) toward Arabic people - was tested using MANOVA procedures. In this analysis periods 1 and 4 (high anxiety) were combined into one group and periods 2 and 3 (moderate anxiety) were combined into a second group. Combining these periods was supported specifically by our findings for indicators of anxiety. More specifically, periods 1 and 4 (combined) would report higher levels on all five dependent variables than periods 2 and 3 (combined). The main multivariate effect of combined periods, (Wilk's Lambda = 0.944,  $F(4, 296.00) = 4.358$ ,  $p = .002$ , eta squared = .056) was significant. Table 3 illustrates the means and standard deviations for each period individually and Table 4 illustrates the means and standard deviations for the combined periods.

**Table 3: Means and Standard Deviations for All Periods**

	Period 1		Period 2		Period 3		Period 4	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Blatant Prejudice	30.45	11.76	25.46	09.83	26.60	09.31	29.91	11.71
Subtle Prejudice	37.09	07.93	35.13	07.83	35.84	08.20	37.66	08.48
Total Prejudice	67.54	18.55	60.59	16.19	62.44	15.76	67.57	18.70
Patriotism	61.07	08.05	60.41	10.49	59.18	11.66	63.47	07.68
Anxiety	62.80	25.32	52.39	19.26	54.20	20.99	61.49	27.55

Note.  $N = 301$  (Period 1 = 74, Period 2 = 94, Period 3 = 80, and Period 4 = 53).

**Table 4: Means and Standard Deviations for Combined Periods**

	Period 1 and 4		Period 2 and 3	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Blatant Prejudice	30.22	11.70	25.98	09.58
Subtle Prejudice	37.33	08.13	35.45	07.99
Total Prejudice	67.55	18.54	61.44	15.98
Patriotism	62.07	07.96	59.84	11.03
Anxiety	62.25	26.17	53.22	20.03

Note.  $N = 301$  (Period 1 and 4 = 127, Period 2 and 3 = 174).

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Planned contrasts (periods 1 and 4 combined versus periods 2 and 3 combined) were conducted in order to compare differences between the two combined periods. As can be seen in Table 5, periods 1 and 4 combined reported significantly higher levels of blatant prejudice, subtle prejudice, total prejudice, and anxiety than periods 2 and 3 combined. Only patriotism was non-significant ( $p = .054$ ), therefore our first hypothesis was partially supported.

**Table 5: Contrasts Between Combined Periods**

	Estimate	<i>SE</i>	<i>P</i>	95% Confidence Interval	
				Lower Bound	Upper Bound
Blatant Prejudice	4.238	1.23	.001.	1.82	6.66
Subtle Prejudice	1.877	0.94	.047	0.03	3.73
Total Prejudice	6.114	2.00	.002	2.19	10.04
Patriotism	2.226	1.15	.054	-0.04	4.49

Anxiety            9.028    2.66   .001      3.79            14.27

Our second hypothesis - participants in the support condition would report lower levels of anxiety and lower levels of prejudice toward Arabic people - was tested using multivariate analysis of variance (MANOVA) to determine the main effect of condition (support or control) on the three measures of prejudice (blatant prejudice, subtle prejudice, and total prejudice) as well as anxiety. The two experimental conditions ( $N = 301$ ; support = 151, protest = 150) produced no significant multivariate main effect (Wilk's Lambda = 0.988,  $F(3, 297.00) = 1.245$ ,  $p = .294$ , eta squared = .012). Follow-up analyses were not conducted due to the lack of significant multivariate findings. Therefore, our second hypothesis was rejected.

Our final hypothesis - women would report higher levels of anxiety, but lower levels of patriotism and prejudice toward Arabs than men - was analyzed using a multiple analysis of variance (MANOVA) procedure. As with the second hypothesis, no significant multivariate main effect was found (Wilk's Lambda = .998,  $F(4, 296.00) = .146$ ,  $p = .97$ , eta squared = .002) and no follow-up analyses were conducted. As such, our third hypothesis was also rejected.

To summarize, anxiety at specified time periods (periods 1 and 4 versus periods 2 and 3) did have an affect on the dependent variables, with the exception of patriotism, as we had predicted. However, the support and protest conditions did not affect prejudice, patriotism, or anxiety as we had predicted. Furthermore, we failed to find significant differences for gender on prejudice, patriotism, or anxiety. Most interesting, however, was that patriotism remained relatively stable across all four periods and for both male and female participants in our study.

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## DISCUSSION

Our study examined the relationship between prejudicial attitudes toward Arabic people, patriotic attachment to the United States, and anxiety produced by impacting events. In particular, three months following the attacks of September 11th and during the war in Iraq (periods 1 and 4), our participants reported higher levels of prejudice and perceptions of anxiety caused by threats of terrorism. Prejudice and anxiety had decreased at 12 and 18 months after the attacks of September 11th (periods 2 and 3). Patriotism, though, remained steady across all four periods, whether high or moderate anxiety producing. These trends support the hypotheses that prejudice toward Arabic people and anxiety are likely to increase in times of threats of terrorism. To state this more plainly, our participants who were more anxious about terrorist attacks reported that they were more prejudiced toward Arabic people.

Although the literature supports the contention that women are less patriotic, prejudicial, and to some extent more anxious, our findings do not support these contentions.

## LIMITATIONS

The sample for our study consisted primarily of White, middleclass college students, a convenience sample, and as such the external validity of our findings is severely limited. Another limitation associated with this study was the contextual factors associated with measures of prejudice. Our measures of prejudice were intended to measure prejudice directed toward Arabs and given the heightened conflicts in the Middle East at the time of data collection, these expressions of prejudice toward Arabs should be treated with caution.

## CONCLUSION

What is clear from our study is that heightened conflict or other events that promote anxiety are associated with prejudice toward those perceived as producing those events. Furthermore, at a national level, these events strengthen nationalistic and patriotic attachment. Although this study does not imply a causal order of these variables it seems feasible that one may certainly lead to another. Presently, data collection to examine longitudinal trends of these attitudinal variables across three geographic locations throughout the United States (South Bend, IN; Kalamazoo, MI; and Brownsville, TX) has begun utilizing the same instruments selected by our original group of students. These data will allow a more complete examination of prejudice toward Arabic people following the conclusion of the Iraq war, as well as trends in patriotic attachment toward the United States.

Although anxiety producing events such as those produced following the attacks of September 11th may never be replicated, ever increasing threats of terrorism reported daily in the media may allow continued follow-up of our study with only slight modification. We expect, and intend to elucidate in further detail with continued data collection, to find that longitudinal trends will indicate that these prejudicial attitudes are associated within the confines of continued international conflict and anxiety produced by threats of terrorism. Given the nature of events and experiences- immediately following the terrorist attacks of September 11th during the first round of data collection and coinciding with the War on Iraq which was well underway during the fourth period of data collection- we suspect that prejudicial attitudes towards Arabs were highly motivated by these events, as can be seen by the relationship between patriotism and prejudice. Furthermore, we believe that with longitudinal data that these prejudicial attitudes will decrease, although patriotic attachments to the nation will remain relatively stable.

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## REFERENCES

Bar-Tal, D. & Labin, D. (2001). The effect of a major event on stereotyping: terrorist attacks in Israel and Israeli adolescent perceptions of Palestinians, Jordanians, and Arabs. *European Journal of Social Psychology*, 31: 265-280.

Coryn, C. L. (2003). *Nationalism and out-group prejudice toward Arab Americans: An exploratory study*. Unpublished manuscript.

Coryn, C. L. (2004). *They're not real Americans: Nationalism and justice for Arab Americans*. Unpublished master's thesis. Indiana University South Bend: South Bend, IN.

Dambrun, M., Desprès, G., & Guimond, S. (2003). On the multifaceted nature of prejudice: Psychophysiological responses to ingroup and outgroup ethnic stimuli. *Current Research in Social Psychology*, 8: 187-206. <http://www.uiowa.edu/~grpproc>

Feshbach, S. (1987). Individual aggression, national attachment, and the search for peace. *Aggressive Behavior*, 5: 315-326.

Feshbach, S. (1990). Psychology, human violence, and the search for peace: Issues in science and social values. *Journal of Social Issues*, 46(1): 183-199.

Freyd, J. L. (2002). In the wake of terrorist attack, hatred may mask fear. *Analysis of Social Issues and Public Policy*, 2(1): 5-8.

Gerstenfeld, P. B. (2002). A time to hate: Situational antecedents of intergroup bias. *Analyses of Social Issues and Public Policy*, 2(1): 61-67.

Horowitz, M. J., Wilner, N., & Alvarez, W. (1979). The Impact of Events Scale: A measure of subjective stress. *Psychosomatic Medicine*, 41: 209-218.

Ibish, H. (2001, September 21). *Anti-Arab hate crimes, discrimination continue*. American-Arab Anti-Discrimination Committee. Retrieved January 16, 2003 from <http://www.adc.org/>

Johnson, S.D. (1992). Anti-Arabic prejudice in Middletown. *Psychological Reports*, 70: 811-818.

Kanihan, S.F. and Gale, K.L. (2003). Within 3 hours, 97 percent learn about 9/11 attacks. *Media Studies of September 11*, 24: 78-92.

Kashti, Y. (1996). Patriotism as identity and action. In D. Bar-Tal & E. Staub (Eds.), *Patriotism in the lives of individuals and nations* (pp. 151-164). Chicago, IL: Nelson-Hall.

Kelman, H. C. (1996). Nationalism, patriotism, and national identity: Social-psychological dimensions. In D. Bar-Tal & E. Staub (Eds.), *Patriotism in the lives of individuals and nations* (pp. 165-189). Chicago, IL: Nelson-Hall.

[176]

[177]

Kelman, H.C. (1997). Negotiating national identity and self-determination in ethnic conflicts: The choice between pluralism and ethnic cleansing. *Negotiation Journal*, 13: 327-340.

Khalema, N.E. & Wannas-Jones, J. (2003). Under the prism of suspicion: Minority voices in Canada post-September 11. *Journal of Muslim Minority Affairs*, 23: 25-39.

Kosterman, R. & Feshbach, S. (1989). Toward a measure of patriotic and nationalistic attitudes. *Political Psychology*, 10(2): 257-274.

Mastrilli, T. & Sardo-Brown, D. (2002). Pre-service teacher's knowledge about Islam: A snapshot post September 11, 2001. *Journal of Instructional Psychology*, 29(3): 156-162.

Monteith, M. & Winters, J. (2002). Why we hate. *Psychology Today*, 35(3): 44-52.

Mummendey, A., Klink, A., & Brown, R. (2001). Nationalism and patriotism: National identification and out-group rejection. *British Journal of Social Psychology*, 4(2): 159-173.

Newport, F. (2001, September 18). Retaliation: Americans strongly behind retaliatory military actions. *Gallup News Service*. Retrieved December 22, 2002 from <http://www.gallup.com/>

Peña, T. & Sidanius, J. (2002). U.S. patriotism and ideologies of group dominance: A tale of asymmetry. *Journal of Social Psychology*, 142(6): 782-790.

Pettigrew, T.F., & Meertens, R.W. (1995). Subtle and blatant prejudice in Western Europe. *European Journal of Social Psychology*, 25(1): 57-75.

PEW Global Attitudes Project. (2002a). *Public more internationalist than in 1990s: Terrorism worries spike, war support steady*. The PEW Research Center for the People and the Press.

Retrieved December 20, 2002 from <http://people-press.org/reports/display.php3?ReportID=166>

PEW Global Attitudes Project. (2002b). *What the world thinks in 2002: How global public views their lives, their countries, the world, America*. The PEW Research Center for the People and the Press. Retrieved December 20, 2002 from <http://people-press.org/reports/display.php3?ReportID=165>

PEW Global Attitudes Project. (2001). *Post September 11 attitudes*. The PEW Research Center for the People and the Press. Retrieved January 26, 2003 from <http://people-press.org/reports/display.php3?PageID=6>

Reed, II, A. & Aquino, K.F. (2003). Moral identity and the expanding circle of moral regard towards out-groups. *Journal of Personality & Social Psychology*, 84: 1270-1287.

Ruby, C. L. (2002). The definition of terrorism. *Analysis of Social Issues and Public Policy*, 2(1): 9-14.

[177]

[178]

Schlachter, A. & Duckitt, J. (2002). Psychopathology, authoritarian attitudes, and prejudice. *South African Journal of Psychology*, 32(2): 1-9.



- Sergent, M.T. & Woods, P.A. (1992). University students' attitudes toward Arabs: intervention implications. *Journal of Multicultural Counseling & Development*, 20(3): 123-132.
- Silver, R.C., Holman, E.A., McIntosh, D.N., Poulin, M., & Gil-Rivas, V. (2002). Nationwide longitudinal study of psychological responses to September 11. *Journal of the American Medical Association*, 288: 1235-1244.
- Slone, M. (2000). Responses to media coverage of terrorism. *Journal of Conflict Resolution*, 44(4): 508-523.
- Tajfel, H. (1982). *Human groups and social categories*. New York, NY: Cambridge University Press.
- Tajfel, H., & Turner, J. C. (1988). The social identity theory of intergroup behavior. In S. Worchel, & W. G. Austin (Eds.), *Psychology of intergroup relations*. Chicago, IL: Nelson-Hall.
- Ursano, R.J. (2002). Post-traumatic stress disorder. *New England Journal of Medicine*, 346(2): 130-133.
- U. S. Department of Homeland Security (2001-2003). *Homeland security advisory system*. Available from <http://www.dhs.gov/dhspublic/display?theme=29>.
- Wayment, H. A. & Cordova, A. (2003). Mental models of attachment, social strain, and distress following a collective loss: A structural modeling analysis. *Current Research in Social Psychology*, 9(2): 18-32.
- Worchel, S., & Coutant, D. (1997). The tangled web of loyalty: Nationalism, patriotism, and ethnocentrism. In D. Bar-Tal & E. Stuab (Eds.), *Patriotism in the lives of individuals and nations*. Chicago, IL: Nelson-Hall.
- Yin, S. (2002). Historical perspectives. *American Demographics*, 24(1): 11-15.

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## APPENDIX A

### Blatant and Subtle Prejudice Scales (Pettigrew & Meertens; 1995)

#### Blatant Prejudice Scale (Pettigrew & Meertens, 1995)

Strongly  
Agree

Strongly  
Disagree

1. Arabic people have jobs that Americans should have.

1	2	3	4	5	6
---	---	---	---	---	---

2. Most Arabic people living here who receive support from welfare could get along without it if they tried.

1	2	3	4	5	6
---	---	---	---	---	---

3. American people and Arabs can never be really comfortable with each other, even if they are close friends.

1	2	3	4	5	6
---	---	---	---	---	---

4. Most politicians in America care too much about Arabic people and not enough about the average American person.

1	2	3	4	5	6
---	---	---	---	---	---

5. Arabic people come from less able races and this explains why they are not as well off as most American people.

1	2	3	4	5	6
---	---	---	---	---	---

Very Different					Very Similar
-------------------	--	--	--	--	-----------------

6. How different or similar do you think Arabic

1	2	3	4	5	6
---	---	---	---	---	---

people living here are to other American people like yourself- in how honest they are?

Very Bothered

Not Bothered at All

7. Suppose that a child of yours had children with a person of a very different color and physical characteristics than your own. How would you feel if your grandchildren did not physically resemble the people on your side of the family?

1      2      3      4      5      6

Strongly Agree

Strongly Disagree

8. I would be willing to have sexual relations with an Arabic person.

1      2      3      4      5      6

9. I would NOT mind if a suitably qualified Arabic person was appointed as my boss.

1      2      3      4      5      6

10. I would NOT mind if an

1      2      3      4      5      6

Arabic person who had a similar economic background as mine joined my close family by marriage.

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**Subtle Prejudice Scale (Pettigrew & Meertens, 1995)**

	Strongly Agree			Strongly Disagree		
1. Arabic people living here should not push themselves where they are not wanted.	1	2	3	4	5	6
2. Many other groups have come to America and overcome prejudice and worked their way up. Arabic people should do the same without special favor.	1	2	3	4	5	6
3. It is just a matter of some people not trying hard enough. If Arabic people would only try harder they could be as well off as American people.	1	2	3	4	5	6

4. Arabic people living here teach their children values and skills different from those required to be successful in America.

1            2            3            4            5            6

Very  
Different

Very  
Similar

5. How different or similar do you think Arabic people like yourself...

1            2            3            4            5            6

...in the values they teach their children?

6. ...in their religious beliefs?

1            2            3            4            5            6

7. ...in their sexual values or sexual practices?

1            2            3            4            5            6

8. ...in the language they speak?

1            2            3            4            5            6

Very  
Bothered

Not  
Bothered  
at All

1            2            3            4            5            6

Very  
Often

Never

9. How often have you felt sympathy for Arabic people living here?

1            2            3            4            5            6

## APPENDIX B

### Patriotism Scale (Kosterman & Feshbach; 1989)

	Strongly Agree			Strongly Disagree		
1. I love my country.	1	2	3	4	5	6
2. I am proud to be an American.	1	2	3	4	5	6
3. In a sense, I am emotionally attached to my country and affected by its actions.	1	2	3	4	5	6
4. Although at times I may not agree with the government, my commitment to the U. S. always remains strong.	1	2	3	4	5	6
5. I feel great pride in that land that is our America.	1	2	3	4	5	6
6. It is NOT that important for me serve my country.	1	2	3	4	5	6
7. When I see the American flag flying I feel great.	1	2	3	4	5	6
8. The fact that I am American is an important part of my identity.	1	2	3	4	5	6

9. It is NOT constructive for one to develop an emotional attachment to his/her country.

1	2	3	4	5	6
---	---	---	---	---	---

10. In general, I have very little respect for the American people.

1	2	3	4	5	6
---	---	---	---	---	---

11. It bothers me to see children made to pledge allegiance to the flag or sing the national anthem or otherwise induced to adopt such strong patriotic attitudes.

1	2	3	4	5	6
---	---	---	---	---	---

12. The U. S. is really just an institution, big and powerful yes, but just an institution.

1	2	3	4	5	6
---	---	---	---	---	---

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## APPENDIX C

### Impact of Events Scale (Horowitz, Wilner, & Alvarez; 1979)

Below is a list of difficulties people sometimes have after stressful life events. Please read each item, and then indicate how distressing each difficulty has been for you **DURING THE PAST SEVEN DAYS** with respect to **TERRORIST ATTACKS**, how much you were distressed and bothered by these difficulties.



	Strongly Agree			Strongly Disagree		
1. Any reminder brought back feelings about it.	1	2	3	4	5	6
2. I had trouble staying asleep.	1	2	3	4	5	6
3. Other things kept making me think about it.	1	2	3	4	5	6
4. I felt irritable and angry.	1	2	3	4	5	6
5. I avoided letting myself get upset when I thought about it or was reminded of it.	1	2	3	4	5	6
6. I thought about it when I did not mean to.	1	2	3	4	5	6
7. I felt as if it had not happened or was not real.	1	2	3	4	5	6
8. I stayed awake from reminders about it.	1	2	3	4	5	6
9. Pictures have popped into my mind.	1	2	3	4	5	6
10. I was jumpy and easily startled.	1	2	3	4	5	6
11. I tired NOT to think about it.	1	2	3	4	5	6
12. I was aware that I still had a lot of feelings about it, but I did	1	2	3	4	5	6

not deal with them.

13. My feelings about it were kind of numb.      1      2      3      4      5      6

14. I found myself acting or feeling as though I was back at that time.      1      2      3      4      5      6

15. I had trouble falling asleep.      1      2      3      4      5      6

16. I had waves of strong feelings about it.      1      2      3      4      5      6

17. I tried to remove it from my memory.      1      2      3      4      5      6

18. I had trouble concentrating.      1      2      3      4      5      6

19. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart.      1      2      3      4      5      6

20. I had dreams about it.      1      2      3      4      5      6

21. I felt watchful or on-guard.      1      2      3      4      5      6

22. I tried NOT to talk about it.      1      2      3      4      5      6

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## APPENDIX D

**Table 8: Correlation Matrix of Blatant Prejudice, Subtle Prejudice, Total Prejudice, Patriotism, and Anxiety**

	1.	2.	3.	4.	5.
1. Blatant Prejudice	-	.694**	.942**	.208**	.428**
2. Subtle Prejudice		-	.896**	.199**	.290**
3. Total Prejudice			-	.221**	.400**
4. Patriotism				-	.310**
5. Anxiety (IOE)					-

*Note.* \*\* Correlation is significant at the 0.01 level (2-tailed).

### **AUTHORS' NOTES**

This study was conceptualized and designed as a component of a P211 Experimental Research Methods in Psychology course at Indiana University South Bend, taught by Dr. James M. Beale. Students in this course played an integral role in the ongoing nature of the study. Although we cannot recognize each of these students individually, we would like to express our appreciation and hope that this study offered a great learning experience in the design, implementation, data collection, and to a lesser degree analysis of data.

It should further be recognized that several aspects of this study were conducted and completed by Indiana University South Bend psychology students; such as the literature review and introduction. Although we cannot recognize each of these students individually, we would like to express our appreciation and hope that this study offered a unique learning experience in research design, implementation, data collection, and to a lesser extent data analysis. These students' endeavors substantially contributed to this study.

### **AUTHORS' BIOGRAPHIES**

Chris L. Coryn is a doctoral and research associate in interdisciplinary evaluation at Western Michigan University. His research interests include culturally-shared beliefs, social change, intergroup conflict, social identity, the psychology of hate, and international development. [christian.coryn@wmich.edu](mailto:christian.coryn@wmich.edu)

James M. Beale, PhD. is an Assistant Professor of Psychology at the University of Texas Brownsville. His research interests cover a range of topics in perceptual, cognitive, and forensic psychology. [jmbeale@UTB.edu](mailto:jmbeale@UTB.edu)

Krista M. Myers is a junior psychology major at Indiana University South Bend and plans to attend graduate school in counseling psychology. [kmmyers@iusb.edu](mailto:kmmyers@iusb.edu)

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