THE ROLE OF MACROECONOMIC AND GROUP THREAT IN PREJUDICE

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by

Aaron Haas

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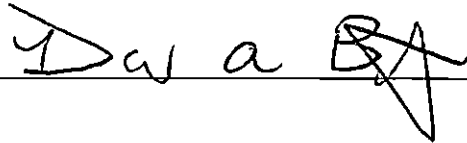Science degree.

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THE ROLE OF MACROECONOMIC AND GROUP THREAT IN PREJUDICE

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Abstract

Previous research by Butz and Yogeeswaran (2011) indicated that when participants were primed with a general state of economic threat (e.g., reminded of an economic downturn), they reported more prejudice against Asian Americans, a group often perceived as economically competitive (i.e. intelligent, hard working) (Maddux, Galinsky, Cuddy, & Polifroni, 2008). The current study aimed to extend prior work by systematically examining the interplay between a general state of threat and outgroup threat in prejudicial responses. Specifically, 110 White/Caucasian participants were primed with a general state of threat (economic threat, violence threat, or no threat) and were then exposed to information portraying Asian Americans as a relatively strong or weak economic threat prior to reporting prejudicial attitudes toward Asian Americans and other outgroups. It was predicted that prejudice against Asian Americans would be greater upon exposure to a general state of economic threat and information portraying Asian Americans as a relatively strong threat, compared to when participants were exposed to an economic threat, but perceived Asian Americans as a weaker threat. Inconsistent with this prediction, results indicated that neither the General threat nor Group threat manipulation

significantly influenced prejudicial attitudes toward Asian Americans or interacted to

predict prejudicial attitudes toward Asian Americans. However, controlling for the

factor of participants' income level revealed the predicted effect of the Group Threat

manipulation in the Economic threat condition. Specifically, prejudice toward Asian

Americans was greater in the General Economic condition when participants were

exposed to the strong vs. weak threat from Asian Americans. The current work also

provided a test of whether factors such as the identity orientation of participants (i.e.

whether they primarily identified as an "American" or preferred the dual racial and

nationality identity "White American") and the extent to which participants included

outgroups in the Americans identity moderated the influence of the threat conditions

on outgroup prejudice. Participants who primarily identified as American reported

more prejudice against groups such as Asian Americans, Gays and Lesbians, and the

poor when presented with the economic threat condition compared to the neutral

condition, however there was no difference in prejudicial attitudes between the

neutral and economic threat conditions among participants who primarily identified

themselves as "White Americans." Analysis in which the inclusiveness of outgroups

in the American identity were included as a predictor of prejudice revealed an

interaction between inclusion and the violence vs. neutral condition code predicting

prejudice against African Americans. Inclusion of African Americans in the

American identity was associated with more favorable attitudes toward African

Americans in the violence threat condition only. Results and future directions are

discussed.

MACROECONOMIC AND GROUP THREAT

Accepted by: _____) Chair

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Macroeconomic Threat

In 2008 the United States entered into the greatest period of economic

downturn since the stock market crash of 1929 (Wills, 2009). Similar to the Great

Depression, the recent recession produced increased levels of unemployment,

poverty, and home foreclosures. However, unlike the Great Depression, the recovery

from the recent recession has been similar in character to the economic recovery in

Japan, known as the Lost Decade (1991-2001), which resulted in years of a static

economy (Ambartsoumian, 2011). Four years after the onset of the recession, many

Americans are still struggling with elevated unemployment and a stagnant economy,

with no sign of immediate change. From January 2010 to April 2012 unemployment

has been between 10.6 and 8.2 percent, while underemployment has steadily

remained between 20 and 18 percent respectively (Jacobe, 2011a).

Clearly aware of the recent economic downturn, in July 2011 69% of

Americans felt the economy was getting worse; 50% reported the economy as "poor",

and only 26% felt the economy was improving. In fact, the Economic Confidence

Index recently dropped to its lowest level since March 2009 (Jacobe, 2011b). These

statistics indicate Americans are feeling the hardships of the economic downturn in

the form of reduced resources such as job opportunities, job security, and career

advancement.

The financial hardship experienced due to the regional and global economic

downturn may have detrimental effects on individuals' wellbeing. Concerns of job

insecurity as well as unemployment have been linked to overall poor health (Laszlo et al., 2010; Moulin, Labbe, Sass, & Gerbaud, 2009). Increased hypertension, which is often associated with increased stress (Markovitz, Matthews, Kannel, Cobb, & D'Agostino, 1993; Schneider, Egan, Johnson, Drobny, & Julius, 1986), has been found to be associated with prolonged unemployment (Janlert, 1992) as well as a decreased sense of financial stability (Hossain, Goyder, Rigby, & Nahas, 2009; Ramachandran, Snehalatha, Vijay, & King, 2002), job security, and education level (i.e. lower education may lead to lower living standards which is associated with increased hypertension) (Levenstein, Smith, & Kaplan, 2001). Furthermore, increased stress levels adversely affect academic performance (Lindahl, Theorell, & Lindblad, 2005).

The development of intrapersonal stress as a result of economic pressures may additionally contribute to a strain on interpersonal relationships. Supporting this proposition, economic hardships have been found to increase incidents of child abuse (e.g., Steinberg, Catalano, & Dooley, 1981) and domestic violence (Hacskaylo, 2009). Unemployment of an individual in a relationship has been found to produce depressive symptoms in the unemployed person as well as their partner, which may lead one's partner to withdraw social support (Vinokur, Price, & Kaplan, 1996). Over time, coping with difficult economic conditions may lead to impaired marital adjustment (Kinnunen & Feldt, 2004), which may lead personal relationships to deteriorate as people displace their anxieties and frustrations on others.

Beyond the negative of economic downturns for interpersonal relationships, it is possible that intergroup relationships will suffer. Hovland and Sears (1940) examined the connection between lynchings of Blacks in the southern states during Reconstruction and the state of the southern economies (measured by the price of cotton). They found that as the price of cotton decreased (indicating an economic downturn) the number of Black lynchings by Whites increased; suggesting that in times of economic hardship dominant majority groups may respond with aggression toward minority outgroups. Furthermore, more sophisticated analysis of Hovland and Sears (1940) supported these results (Hepworth & West, 1988). However, more recent work failed to uncover a relationship between economic conditions and hate crimes directed at the gay and lesbian community (e.g., Green, Glaser, & Rich, 1998), which counters the idea that economic conditions lead to hostility that is unleashed onto a range of outgroups, even groups that are not held responsible for the poor economic conditions.

Group Threat

In considering why economic conditions encourage negative responses to some, but not all, racial/ethnic outgroups, the current work will examine the proposition that the perception of an outgroup as an economic threat (i.e., a threat to money, land, or jobs), may drive prejudicial and aggressive responses toward that group when economic conditions deteriorate. Indeed, one plausible explanation for the relation between economic conditions and Whites' aggressive responses to Blacks in the southern United States is that recently freed Black slaves were competing with

Whites for land ownership, and therefore may have posed an economic threat to Whites (e.g., Raper, 1933/1969). This argument therefore takes into account the extent to which outgroups pose a threat to economic resources and suggests that hostile responses to outgroups in the wake of an economic downturn may not be spread evenly across different outgroups, but may instead be targeted toward specific groups that are perceived as a strong economic threat.

An increasing body of work indicates that racial/ethnic outgroups differ in both the degree and type of threat they pose. Cottrell and Neuberg (2005), for example, demonstrated that although people respond with similar levels of prejudice toward racial/ethnic outgroups, outgroups pose qualitatively different types of threats. When assessed for perception of threat, African Americans were reported as being a threat to economic and personal security as well as health and property more so than non racial groups such as Feminists and Fundamental Christians. Furthermore, when asked to perform the same task in reference to non-racial groups such as Gays, Feminists, and Fundamental Christians, participants again reported a general heightened prejudice toward all three groups which did not differ between the groups. However, when assessing for different types of threat, Feminists, Fundamental Christians, and Gays were specifically perceived as posing a threat toward social coordination, freedoms, and health respectively. Furthermore, all three groups were seen as threats to personal values. Further supporting these ideas, Stephan et al. (2002) argued that three types of threat: realistic threat (i.e. threats to political or economic security of the ingroup), symbolic threat (i.e. threat to the morals, values,

and traditions of the ingroup), and intergroup anxiety (i.e. feelings of threat held while interacting with members of the other group) contribute to negative outgroup attitudes. Thus, this work provides evidence there are different types of threats that outgroups may pose, and such threat responses are important determinants of prejudicial attitudes toward these groups. Following from the aforementioned research, the present work focuses on realistic threat posed by an outgroup as a source of subsequent prejudicial responses.

The tie between threat and prejudice is further illustrated in work indicating that people harbor prejudice toward specific groups that are perceived as possessing economic power (e.g., Bobo, 1983; LeVine & Campbell, 1972; Stephan & Stephan, 2000). Recently, King, Knight and Hebl (2010) examined the effect of a realistic threat to group security by exposing White participants to the economic threat of changes in diversity policy. King et al. postulated that changes in diversity policy to further accommodate minority members in the workplace would produce a sufficient threat to employees that did not identify as a minority. In turn, the economic threat posed by minority group members was expected to result in negative attitudes toward minority group members and influence support for minority-related policies (i.e. affirmative action). Consistent with this possibility, participants in the economic threat group evaluated minority female candidates for employment more harshly than their White male counterparts. Furthermore, individuals in the economic threat group also reported increased resistance toward programs related to diversity in the workplace. This work ultimately demonstrates that the economic threat produced by

an outgroup perceived as competing for limited resources (i.e. job security, wages) may encourage negative attitudes toward outgroup members (see also Esses, Jackson & Armstrong, 1998).

Although threat and prejudice is often thought to stem from negative stereotypes and beliefs about outgroup members, an increasing body of work on threat and prejudice indicates that the attributes that lead outgroups to become a particularly strong economic threat may include positive characteristics. For example, Maddux, Galinsky, Cuddy, and Polifroni (2008) (see also Cottrell & Neuberg, 2005) proposed that positive attributes of some outgroups may lead them to be perceived as a particularly strong economic threat, which may in turn have implications for prejudicial responding. In particular, these researchers have argued that groups such as Asian Americans, who are stereotyped as highly intelligent and competent, may experience prejudice because these positive attributes lead members of this group to be perceived as a strong threat to economic resources. Thus, viewing Asian Americans as possessing economically desirable and positive traits (i.e. intelligence, hard working) may ultimately lead to threat responses that promote increased prejudice toward members of this group.

Consistent with this theorizing, Butz and Yogeeswaran (2011) demonstrated that participants perceived Asian Americans to be a stronger economic threat than other ethnic outgroups (e.g., Hispanic/Latinos, Blacks/African Americans). Additionally, they demonstrated that participants who were exposed to an editorial about the economic downturn in the U.S. responded with greater prejudice against

Asian Americans than participants who were exposed to an editorial about a non-economic threat and participants who read a neutral passage about a national park. Macroeconomic threat did not engender prejudice toward groups for which the content of the group stereotype implies a lesser threat to economic resources (i.e. Black Americans). Taken together, these findings indicate that heightening macroeconomic threat potentiates prejudice toward outgroups that are perceived as a strong economic threat.

Although prior work supports the idea that one consequence of the recent economic downturn may be an increase in prejudice toward economically-threatening outgroups, this work did not systematically examine the role of the degree of economic threat posed by an outgroup, a factor argued to be of crucial importance in the link between economic threat and outgroup prejudice. Thus, the primary goal of the present work is to provide evidence that economic threat only potentiates prejudice toward outgroups perceived as a strong economic threat through manipulating the degree of economic threat posed by an outgroup. More specifically, in addition to a manipulation of economic threat that is unrelated to any outgroup, participants will be exposed to a group threat manipulation in which they are presented with information portraying an outgroup (Asian Americans) as at an advantage in securing jobs over Whites (i.e., strong economic threat) or at a disadvantage in securing jobs compared to Whites (i.e., weak economic threat). Consistent with arguments presented in Butz and Yogeeswaran (2011), the economic threat manipulation should only result in increased prejudicial attitudes toward Asian

Americans when this group is perceived to be a strong threat to economic resources. By contrast, economic threat should not increase prejudice against Asian Americans when this group is perceived to be a relatively weaker economic threat.

American Identity

Beyond examining the degree of threat posed by an outgroup as a source of prejudicial responses, there may be individual difference variables that help to clarify which individuals will respond with heightened prejudice upon exposure to threatening information. In particular, the degree and type of an individual's identification as an American may play a role in how individuals view and respond to outgroup members, and therefore contribute to the magnitude of prejudice in response to threat. One of the major research models concerning the prejudicial attitudes of individuals toward outgroups is the Common Ingroup Identity Model, developed by Gaertner and colleagues. The Common Ingroup Identity Model (CIIM; Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993) suggests that the recategorization of ingroups and outgroups into a more inclusive group, such as going from a racial based grouping system to a nationality based system (i.e. categorizing oneself not by race, but by nationality), reduces prejudice toward members of groups that were originally seen as "outgroups" (Eller & Abrams, 2004; Gaertner et al., 1993; Gomez, Dovidio, Huici, Gaertner, & Cuadrado, 2008; Riek, Mania, Gaertner, McDonald, & Lamoreaux, 2010). Thus, according to this perspective, individuals who hold an identity orientation in which they perceive themselves as "American" may respond with low levels of prejudice toward outgroups if they perceive these outgroups as

being part of the broad "American" identity.

However, recent findings call into question the extent to which racial

outgroups are perceived as part of the broader American identity. In particular, recent

research indicates that Whites are more strongly associated with the identity

"American" than are other racial/ethnic groups (e.g., Devos & Banaji, 2005). In

Devos and Banaji's work, although White participants reported explicit commitments

to egalitarian principles (i.e. non-prejudicial views), implicit responses consistently

revealed that African and Asian Americans were less strongly associated with the

American identity than were Whites. Examination of the responses of Asian

American participants revealed that such responses were consensual -- they, like the

White participants, posed stronger associations between the concepts of American

and White than with other groups, including their own. Overall, these results suggest

that if identifying as American is closely associated with identifying as "White", then

a White American identifying as American may automatically perceive non-White

racial/ethnic outgroups included in the American identity to a lesser extent. Indeed,

work by Gaertner and Dovidio (2000) has acknowledged that recategorization of

individuals into a superordinate group such as "American" may not always reduce

prejudicial attitudes nor improve intergroup relations. Although more work is needed

to fully understand the limitations of the CIIM, it is possible that superordinate

identities may sometimes fail to reduce outgroup prejudice because people differ in

the extent to which outgroups are perceived as part of the superordinate identity.

In contrast to approaches derived from the CIIM, a more recent approach has

examined the potential for dual identities (i.e. identifying as a White American) to

attenuate outgroup prejudice. Dach-Gruschow and Hong (2006) manipulated the

identity of White Americans to create two different identity orientation categories: the

superordinate American identity and the dual White American/European American

identity to examine if this manipulation would influence the degree of prejudice

reported. They had participants complete an open ended essay on how to improve

society in America and manipulated the first sentence of the essay to state either "As

an American, I..." for the single identity condition or "As a White American I..." or

"As a European American I..." for the dual identity condition. Following the essay,

participants were presented with a Hurricane Katrina Blame measure aimed at

assessing racial discrimination after the disaster as a means to assess prejudice.

Results indicated that those who were in the superordinate "American" identity

condition reported much higher prejudice than those who were in the dual White-

American/European American identity. Thus, these results provide initial support for

the idea that adopting dual identities may be more beneficial for reducing outgroup

prejudice than identifying with a single superordinate identity.

　　　These results, considered along with Devos and Banaji's (2005) findings,

support the idea that individuals who define themselves in terms of a superordinate

American identity may respond with outgroup prejudice because they may fail to

perceive outgoups as strongly associated with the American identity. However, self

identification as a White American places oneself into a subcategory within the

American identity, which has the implication that a person may be knowledgeable,

and perhaps accepting that other racial groups (e.g. African Americans, Asian Americans) comprise the American identity (Dach-Gruschow & Hong, 2006). To provide a preliminary examination of the role of identity orientation in threat responses and prejudice, the current study will assess identity orientation as an individual difference variable. Participants will report the extent to which they view themselves as part of a singular "American" identity (i.e. I identify myself as an American) or as a dual "White American" identity (i.e. I identify myself as a White American). Based upon Dach-Gruschow and Hong (2006), it is hypothesized that those whose self identity is more closely aligned with "American" will report more prejudicial views toward Asian Americans than those whose self identity is more closely aligned with being a White American across both the General and the Group threat conditions.

Secondly, to further examine the influence of identity, I intend to test whether participants' inclusion or exclusion of different racial groups in the American identity influences prejudice, specifically toward Asian Americans. Although some work supports the idea that establishing a superordinate identity between groups reduces threat (Riek et al., 2010) and group biases (Eller & Abrams, 2004; Gomez et al., 2008), recent work indicates that racial outgroups are differentially included in the American identity (e.g. Devos & Banaji, 2005). As stated earlier, Devos and Banaji (2005) provided evidence that being American is strongly associated with being White and other racial groups are relatively excluded from the American identity. Because groups vary in the extent to which they are included in the American

identity, prejudicial responses may be more likely when individuals are excluding outgroups such as Asian Americans from the American identity. Conversely, it would be expected, based on the CIIM (Eller & Abrams, 2004; Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993; Gomez et al., 2008; Riek et al., 2010), that those who are more inclusive will report lower prejudicial attitudes. As such, it is likely that those who are more exclusive of Asian Americans in the American identity will report higher prejudice toward Asian Americans.

Finally, considering Dach-Gruschow and Hong's (2006) work, which suggests that superordinate identities such as identifying as "American" may not necessarily lower prejudicial responses, alongside evidence that outgroups that are excluded from the American identity may be more prone to experience prejudice, it stands to reason that the combination of adopting a superordinate "American" identity orientation, while also excluding minority groups from the American identity may exacerbate prejudice. Since an accumulating body of work indicates that more exclusive representations of identity (i.e., perceiving outgroups as excluded in superordinate identities such as the "American" identity) may heighten prejudice, it is hypothesized that individuals who hold more exclusive representations will respond to the economic threat and group threat manipulations in a different manner than individuals who hold relatively more exclusive representations of identity. Specifically, it is expected that individuals who strongly identify as an "American," but hold a more exclusive view of the American identity (i.e., perceive outgroups such as Asian Americans as not strongly included in the American identity) will respond with high

levels of prejudice when they are exposed to information indicating an economic threat and a group threat from Asian Americans. In other words, the combination of economic threat and group threat from Asian Americans should have a particularly strong prejudice-increasing effect among individuals who identify as an American, but perceive Asian Americans as largely excluded from the American identity. In contrast, it is expected that the combination of economic and group threat from Asian Americans will not significantly increase prejudice among individuals who hold a more inclusive representation of the American identity, and therefore gravitate toward a dual identity (White American) and perceive Asian Americas as strongly included in the American identity.

Method

Participants and Design

One hundred thirty students from the Psychology Department subject pool at Morehead State University were recruited to participate in the research project. Of the original 130 students, 19 were removed due to unsatisfactory responses to the graph comprehension portion, race, response sets, and/or incomplete data. One participant was removed as their responses on the prejudice measure were more than three standard deviations from the mean. The final total number of participants was 110 (76% Female, M_{age}=19.81).

The study employed a 3 (General Threat: Economic threat vs. Non-Economic threat vs. Neutral (no threat)) x 2 (Group threat: Strong vs. Weak) between-participants design. Identity orientation and inclusion of outgroups in the American

identity were treated as continuous independent variables.

Procedure

Prior to their arrival, participants were randomly assigned to the threat

conditions. Participants provided consent by signing a consent form (Appendix A).

As part of the consent process, participants learned that they were taking part in a

study on graph interpretation and comprehension. Upon completion of the informed

consent, participants completed a short computerized demographics questionnaire,

which contained questions about gender, race, and factors that might relate to the

experience of economic threat (i.e. income level; see Appendix B). Within the

demographics section, participants were also asked to complete two questions, one

regarding their own identity orientation (American vs. White American) and the other

regarding the inclusiveness of outgroups in the American identity. The personal

identity question was a 10 point Likert scale, in which participants were asked to

report whether they self identified as an "American"(1) or a "White-American"(10) as

a means to establish a singular identity or a dual identity respectively. Higher

numbers on this scale represent primarily identifying as a White American. In the

inclusiveness of other groups in the American identity question participants were

asked to think about the American identity and rate the extent to which they

considered various ethnic outgroups to be represented in the American identity.

Responses were made on a 1 (strongly disagree) to 7 (strongly agree) scale. Higher

numbers on this scale represented stronger agreement that outgroups are included in

the American identity.

General Economic Threat. Upon completion of the demographics

questionnaire, participants were presented with one of three different sets of graphs

used to manipulate threat. The graph used in the general economic threat condition

depicted an increasing trend of unemployment nationwide since 2008, ending with a

fabricated 2015 projection for high levels of unemployment (see Appendix C). To

instill a threat that involved a projection of future negative events that were not

explicitly tied to economic issues, a second condition was crafted. Participants

exposed to this graph saw an increasing trend of violent crimes throughout the United

States from 2008 to 2015, in which the 2015 value of violent crimes was a fabricated

projection. Finally, participants in the neutral threat control condition were exposed to

a graph that depicted a stable trend in the United States squirrel population. As such,

this graph did not include any projection of negative events and was not intended to

induce a threat in participants. To solidify the cover story and check that participants

were attending to the pertinent information in the graphs, participants were asked to

write a description of the trends depicted in each graph. Participants that failed to

display an acceptable comprehension of the subject matter were excluded from

analysis. Participants were also asked at the end of the study to report the degree to

which their graph used to manipulate general threat was threatening on a 1 (not

threatening) to 7 (very threatening) Likert scale. This section was used as a check for

the salience of the manipulation.

Group Threat. Within the three general threat groups, participants were

presented with one of two sets of supplementary graphs aimed at depicting an

outgroup as either a strong or weak threat to economic resources (i.e. threat to employment) (see Appendix D). In both conditions, participants were presented a graph depicting employment prospects of recent graduates from Morehead State University by racial groups (i.e. Whites, Asian Americans, Blacks, and Hispanics). In the Strong Threat condition, Asian Americans were presented as maintaining strong employability from 2008 to 2015, sharply increasing in projected employability in the fabricated 2015 value. Whites were depicted as the second strongest group following Asian Americans, with a trend that levels off at the projected 2015 date. Blacks and Hispanics were presented as significantly lower than Asian Americans and Whites, and were indistinguishable from one another in term of employability. In the Weak Threat condition, the trends of Asian Americans and Whites were switched, depicting Whites as the strongest employment group, followed by Asian Americans. To solidify the cover story and check that participants were attending to the pertinent information in the graphs, participants were asked to write one or two sentences describing the trends depicted in each graph. Participants that failed to display an acceptable comprehension of the subject matter were excluded from analysis. Participants were also asked at the end of the study to report the degree to which the group threat graph was threatening on a 1 (not threatening) to 7 (very threatening) Likert scale. This section was used as a check for the salience of the group threat manipulation.

As a distracter, participants were presented with a graph depicting attendance trends at a national park over the last four years, ending with a 2015 projection. The purpose of the distracter graph was to disguise the true purpose of the study (see

Appendix E).

Prejudice. Following the completion of the graph portion, participants were asked to complete a short Feeling Thermometer questionnaire aimed at measuring prejudicial attitudes toward Asian Americans and other racial/ethnic groups of potential interest (see Appendix F). Furthermore, to mask the true purpose of this assessment, prejudicial attitudes toward other groups (e.g., Republicans, Democrats, Jews) were assessed. Responses on this scale ranged from 0 to 10 (representing zero degrees to 100 degrees respectively) with lower numbers indicating colder feelings (greater prejudice) and higher numbers indicating warmer feelings (less prejudice). Upon completion of this scale, participants were presented with a debriefing form outlining the study they completed and explaining any deception (see Appendix G).

Results

Manipulation Checks

To examine the effectiveness of the experimental manipulations, a two-way ANOVA was used to examine the ratings of how threatened participants were by the stimuli presented. The analysis of threat ratings of the graphs employed in the General Threat manipulation revealed a significant General Threat by Group Threat interaction, $F(2, 104) = 4.798, p = .010$. To probe this interaction, the effect of Group Threat was examined within each General Threat Condition. Analysis revealed a significant effect of Group Threat when participants were exposed to the general economic threat condition, $F(1, 34) = 4.220, p = .048$. Participants reported that the

economic threat condition graph was more threatening when also being exposed to

the strong outgroup threat condition (M = 5.529, SD = 1.586) compared to when

exposed to the weak outgroup threat condition (M = 4.263, SD = 2.050). This

analysis reveals that participants exposed to the general economic threat graph and

the strong outgroup threat graph rated the economic threat graph as more threatening

than participants exposed to the general economic threat graph and the weak outgroup

threat graph. Threat ratings of the violence threat graph upon exposure to the strong

outgroup threat (M = 3.368, SD = 1.739) and the weak outgroup threat (M = 4.278,

SD = 1.742) did not significantly differ, $F(1, 35)$ = 2.523, p = .121. Similarly, threat

ratings of the neutral graph upon exposure to the strong outgroup threat (M = 1.400,

SD = .681) and the weak outgroup threat (M = 1.118, SD = .485) did not significantly

differ, $F(1, 35)$ = 2.041, p = .162 (see Figure 1).

A two-way ANOVA was also conduced to examine threat ratings of the

Group Threat stimuli. This analysis revealed a significant effect of the Group Threat

condition, $F(1, 104)$ = 20.355, p < .001, such that the strong outgroup threat graph

was rated as more threatening (M = 3.196, SD = 1.742) than the weak outgroup threat

graph (M = 1.889, SD = 1.208). The Group Threat condition did not interact with the

General Threat condition, $F(2, 104)$ = .383, p = .683.

Effects of General and Group Threat

A two-way ANOVA was conducted on prejudice toward Asian Americans

that included the variables of General Threat condition (General Economic Threat,

Non-Economic Threat, and Neutral) and the Group Threat condition (Strong vs.

Weak outgroup threat). Although the average prejudice scores for the General Threat

condition (see Table1) were in the predicted direction, the analysis did not reveal a

main effect of General Threat condition $F(2, 104) = .404, p = .668$. Participants did

not report significantly more prejudicial attitudes toward Asian Americans in the

economic condition ($M = 6.861$, $SD = 1.588$) than in the neutral condition ($M =$

7.270, $SD = 2. 130$). Prejudice scores also did not significantly differ across the

strong vs. weak group threat conditions, $F(1, 104) = .004, p = .949$. Participants did

not report more prejudice toward Asian Americans in the strong threat condition ($M =$

7.018, $SD = 2.136$) than in the weak threat condition ($M = 7.019$, $SD = 2.060$).

Furthermore, the predicted interaction between the General Threat and the Group

Threat conditions was not significant $F(2, 104) = 1.039, p = .357$ (see Table 1).

Because participants were expected to vary in their income, and lower levels

of income might lead participants to be more susceptible to the effects of the General

and Group Threat manipulations, subsequent ANCOVA analyses were conducted in

which the income level variable was entered as a covariate. Of particular interest was

whether the effects of the General Threat and Group Threat manipulations became

stronger upon controlling for individual differences in income level. Although the

effect of the income covariate did not reach a conventional level of significance, $F(1,$

$98) = 2.643, p = .11$, this non-significant trend suggested that lower income was

associated (although non-significantly) with more prejudice. The General Threat X

Group Threat interaction was also not statistically significant, $F(2, 98) = 1.644$, $p = .198$. However, examining the effects in the key economic threat condition revealed effects that were consistent with predictions. Income level predicted prejudicial attitudes toward Asian Americans in the economic threat condition, $F(1, 32) = 4.789$, $p = .036$, suggesting that as individual income decreased, prejudicial attitudes toward Asian Americans became increased. The analysis also revealed a significant effect of the Group Threat manipulation in the economic threat condition when controlling for income $F(1, 32) = 4.967$, $p = .033$ (see Figure 2). When participants had been reminded of an economic threat, they reported more prejudice toward Asian Americans (i.e., colder attitudes) in the Strong Threat condition ($M = 6.352$, $SD = 1.447$) than the Weak Threat condition ($M = 7.445$, $SD = 1.447$). Neither the income variable nor the group threat manipulation predicted prejudicial attitudes toward Asian Americans in the violence or neutral threat condition ($Fs < 1$, $ps > .40$).

A similar ANCOVA was conducted for prejudicial attitudes toward African Americans to assess whether controlling for income had an effect on prejudicial attitudes toward other outgroups. This ANCOVA analysis did not reveal a significant effect of income on prejudice toward African Americans, $F(1, 98) = 2.474$, $p = .119$. All other effects, including the General Threat x Group Threat interaction were not significant (all $Fs < 1.77$, $ps > .18$). However, further analysis found a similar effect of income on prejudicial attitudes toward African Americans in the economic threat condition, $F(1, 32) = 5.303$, $p = .028$. The analysis also revealed an effect of Group

Threat on prejudicial attitudes toward African Americans in the economic threat condition (controlling for income), $F(1, 32) = 4.218, p = .048$. Participants reported more prejudice (i.e., colder attitudes) toward African Americans in the Strong Threat condition ($M = 6.398, SD = 1.682$) than the Weak Threat condition ($M = 7.569, SD = 1.680$) when exposed to the economic threat condition and controlling for income.

Similar to the ANCOVA conducted for prejudicial attitudes toward African Americans, another ANCOVA was conducted for Hispanics to assess whether controlling for income had an effect on prejudice. This ANCOVA analysis did not reveal a significant effect of income on prejudice toward Hispanics, $F(1, 98) = .598, p =.441$. All other effects, including the General Threat x Group Threat interaction were not significant (all Fs $< .954, ps > .388$). Contrary to the findings for African Americans, analysis of prejudice toward Hispanics did not reveal any significant effects of the income covariate variable or group threat manipulation in the general threat conditions (all Fs $< 1.85, ps > .18$).

The ANCOVA conducted for prejudicial attitudes toward Jews did not reveal a significant effect of income on attitudes toward Jews, $F(1, 32) = 1.129, p = .291$. All other effects, including the General Threat x Group Threat interaction were not significant (all Fs $< 2.143, ps > .12$). Further analysis of prejudice toward Jews found a marginally significant effect of income on prejudice toward Jews in the General Economic Threat condition, $F(1, 32) = 3.095, p = .088$. The analysis also revealed a marginal effect of Group Threat on prejudice toward Jews in the economic threat

condition (controlling for income), $F(1, 32) = 3.207$, $p = .083$. Participants reported

more prejudice (i.e., colder attitudes) toward Jews in the Strong Threat condition (M

$= 6.241$, $SD = 1.608$) than the Weak Threat condition ($M = 7.217$, $SD = 1.608$) when

exposed to the economic threat condition and controlling for income.

Effects of Single vs. Dual Identity

A series of regression analyses were conducted to examine the moderating

role of identity orientation (i.e. whether participants primarily identified as American

or White American) on prejudicial views toward Asian Americans. To do so, two

dummy codes to represent contrasts between the General Threat conditions were

created. The neutral threat condition served as the reference group, and therefore was

assigned a 0 on both dummy codes. One code contrasted the economic threat with the

neutral threat condition (Economic Threat = 1, Neutral Threat = 0) and the other

contrasted the violence threat with the neutral threat condition (Violence Threat = 1,

Neutral Threat = 0). These dummy codes and other main effects were entered in the

first step of the analysis, two-way interactions were entered in the second step of the

analysis, and three-way interactions were entered in the third step of the analysis.

The regression analysis for prejudicial attitudes toward Asian Americans

revealed a two way interaction between identity and the economic threat condition vs.

neutral condition dummy code, $t(98) = 2.053$, $\beta = .270$, $p = .043$.[1] To probe this

interaction, I analyzed the simple effect of identity orientation in the economic and

neutral condition separately. The regression analysis did not reveal a significant effect

of identity orientation in the economic threat condition, $t(32) = .821$, $\beta = .144$, $p = .418$ (or in the Violence Threat condition, $t(35) = -1.324$, $\beta = -.218$, $p = .194$).

However, the analysis did reveal a significant effect of identity orientation on prejudice in the neutral condition, $t(35) = .-2.762$, $\beta = -.423$, $p = .009$, suggesting that when not exposed to any threat, participants primarily identifying as White Americans held more prejudicial views toward Asian Americans than those primarily identifying themselves as American.

To further explore the interaction between identity and threat condition, the effect of the economic threat vs. neutral condition dummy code was examined at 1 SD above the mean on the American identity measure (i.e., among those who endorsed a dual identity orientation) and at 1 SD below the mean on the American identity measure (i.e., among those who endorsed the American identity orientation). This analysis revealed that those identifying as "White Americans" displayed no significant difference between the economic and neutral threat conditions when reporting prejudice toward Asian Americans, $t(103) = 1.093$, $\beta = .159$, $p = .277$. However, among those who identified as "American," the economic threat condition resulted in marginally higher levels of prejudice than the neutral threat condition, $t(103) = -1.805$, $\beta = -.265$, $p = .074$ (see Figure 3). These results suggest that, compared to those who identify as "American," those in the dual "White American" identity were less affected by the economic threat condition and reported views toward Asian Americans similar to those in the neutral threat condition. However, when participants identified themselves as part of the "American" identity and were

exposed to the economic threat, prejudicial attitudes toward Asian Americans

increased marginally in comparison to prejudicial attitudes reported in the neutral

condition.

Similar American identity x economic vs. neutral condition code interactions

were found for other minority status outgroups such as African Americans, $t(98)$ =

2.181, β = .284, p = .032; Hispanics, $t(98)$ = 2.065, β = .264, p = .042; Gays and

Lesbians, $t(98)$ = 3.098, β = .384, p = .003; the Poor, $t(98)$ = 2.432, β = .317, p =

.017; and Jews, $t(98)$ = 2.607, β = .331, p = .011, suggesting that identity orientation

moderated the influence of the economic threat condition on prejudice toward these

outgroups. Participants identifying primarily as White Americans exhibited no

difference in prejudicial attitudes toward African Americans across the economic and

neutral conditions, $t(103)$ = 1.396, β = .204, p = .166. Although not significant, the

effect of the economic vs. neutral condition code was in the opposite direction among

those strongly identifying as Americans, $t(103)$ = -1.475, β = -.217, p = .143.

Participants identifying as White Americans exhibited no difference in prejudice

toward Hispanics across the economic and neutral conditions, $t(103)$ = 1.206, β =

.171, p = .231, whereas American identity individuals reported more prejudice

toward Hispanic Americans in the economic threat compared to the neutral condition,

$t(103)$ = -2.289, β = -.327, p = .024. The economic threat manipulation did not

significantly influence prejudicial attitudes toward Gays and Lesbians among self

identifying White Americans, $t(103)$ = 1.523, β = .213, p = .131, whereas American

identity individuals reported more prejudice toward Gays and Lesbians in the

economic threat compared to the neutral condition, $t(103) = -2.101$, $\beta = -.296$, $p = .038$. Beyond the area of race, the economic threat manipulation did not influence prejudicial attitudes toward the Poor among those identified as White Americans, $t(103) = .517$, $\beta = .076$, $p = .606$, whereas American identity individuals reported marginally more prejudice toward the Poor in the economic threat compared to the neutral condition, $t(103) = -1.751$, $\beta = -.260$, $p = .083$. However, this could be due to the stereotypical perception that individuals making up the "poor" are mostly members of racial minorities. The examination of prejudice toward Jews revealed that those holding a White American identity reported marginally less prejudice against Jews in the economic compared to the neutral threat conditions, $t(103) = 1.761$, $\beta = .249$, $p = .081$. Among those primarily identifying with the American identity, however, prejudicial attitudes were significantly more negative in the economic threat versus the neutral threat condition, $t(104) = -2.481$, $\beta = -.354$, $p = .015$. No further significant results were found among the remaining groups.

Inclusion of Groups in the American Identity

To examine whether the degree of inclusion in the American identity varied across the groups that were rated, a repeated measures ANOVA was conducted. This analysis (with Greenhouse-Geisser correction) revealed a significant effect of group, $F(1.627, 177.349) = 49.972$, $p < .001$. Whites were most included ($M = 5.909$, $SD = 1.411$) followed by African Americans ($M = 5.345$, $SD = 1.281$), Asian Americans ($M = 4.636$, $SD = 1.406$), and finally Hispanics ($M = 4.355$, $SD = 1.554$). Pairwise comparisons (Fisher's LSD) revealed that Whites were significantly more included in

the American identity than African Americans, $p < .001$, Asian Americans, $p < .001$, and Hispanic Americans, $p < .001$. African Americans were found to be significantly more included in the American identity than Hispanic Americans, $p < .001$ and Asian Americans, $p < .001$. Finally, Asian Americans were significantly more included in the American identity than Hispanic Americans, $p = .001$.

To examine whether the degree of inclusion of a group moderated the influence of the threat conditions on prejudicial responses to that group, a series of regression analyses were conducted. Two dummy codes to represent contrasts between the General Threat conditions were created. The neutral threat condition served as the reference group, and therefore was assigned a 0 on both dummy codes. One code contrasted the economic threat with the neutral threat condition (Economic Threat = 1, Neutral Threat = 0) and the other contrasted the violence threat with the neutral threat condition (Violence Threat = 1, Neutral Threat = 0). These dummy codes and the variable representing the degree of inclusion for a particular group were entered in the first step of the regression analysis. All two-way interactions were entered in the second step of the analysis and all three-way interactions were entered in the third step of the analysis.

The regression analysis for prejudice toward Asian Americans did not reveal a significant effect of inclusion of Asian Americans in the American identity on prejudice toward Asian Americans, $t(105) = 1.570$, $\beta = .155$, $p = .12$. The second and third steps of the regression analysis did not reveal any significant interactions between the inclusiveness of Asian Americans in the American identity involving the

economic vs. neutral condition code or the violent vs. neutral condition code (ts < 1.52, ps > .13).

When looking at African Americans, the regression analysis revealed a significant two-way interaction between inclusion of African Americans in the American identity and the violence vs. neutral condition code predicting prejudice toward African Americans, $t(100) = 2.235$, $\beta = .267$, $p = .028$. Upon splitting the file based on the General Threat condition, a significant association was found between the inclusion of African Americans in the American identity and prejudicial views toward African Americans in the violence condition, $t(34) = 2.517$, $\beta = .392$, $p = .017$, but not in the economic or neutral condition (ps >.28). This suggests that in the violence condition, as inclusion of African Americans in the American identity increases, prejudicial attitudes decreased. When inclusion is low, prejudicial attitudes increased. Examined a different way, the violence condition led to marginally greater prejudice among those who did not perceive African Americans as highly included in the American identity, $t(105) = -1.739$, $\beta = -.291$, $p = .085$. However, the violence condition did not increase prejudice among participants who perceived African Americans as highly included in the American identity, $t(105) = .896$, $\beta = .126$, $p = .372$ (see Figure 4).

For Hispanics, the regression analysis revealed a main effect between the inclusion of Hispanics in the American identity and prejudice toward Hispanic Americans, $t(105) = 2.859$, $\beta = .271$, $p = .005$ such that higher levels of inclusiveness were associated with less prejudicial attitudes toward Hispanic Americans. The

second and third steps of the regression did not reveal any significant interactions (*t*s

< 1.52, *p*s > .13).

Identity Orientation and Inclusion of Groups in the American Identity

To examine the possibility that prejudice toward Asian Americans was greater

among those who primarily identified as "American" but perceived outgroups as

highly excluded from the American identity, a final set of regression analyses

included both the American identity variable and the variable representing

inclusiveness in the American identity, as well as all two, three, and four-way

interactions involving these variables and the variables representing the experimental

conditions. The analysis for prejudicial attitudes toward Asian Americans did not

reveal any significant effects beyond those reported in previous analyses. Similarly,

the analyses for prejudicial attitudes toward African Americans and

Hispanics/Latinos did not reveal any significant effects beyond those reported in

previous analyses. Thus, the results of these analyses do not provide support for the

idea that individuals who primarily identify as American but view outgroups as

largely excluded in the American identity respond with greater prejudice, either

overall or in response to particular combinations of general and group threat.

Discussion

General vs. Group Threat

One purpose of the current study was to provide additional insight into the

influence of macroeconomic threat on prejudicial responses to racial/ethnic

outgroups. Butz and Yogeeswaran (2011), for example, found that participants who

were primed with the threat of an economic downturn by reading an editorial about the struggling economy reported heightened prejudice toward groups for which the stereotype implies a threat to economic resources (i.e. Asian Americans), but not toward groups such as African Americans. In the current study, economic threat was manipulated in a different manner by exposing participants to a graph depicting increasing unemployment in the United States over time. Participants in the other conditions were either exposed to a threat unrelated to economic issues (i.e., increasing violence in the United States) or to neutral information that was not intended to evoke a threat (i.e., graph depicting the squirrel population in the United States). In examining the effect of the General Threat manipulation, the results of the current study, although not significant, did produce the same trend in prejudicial attitudes toward Asian Americans observed in Butz and Yogeeswarans's work (i.e. somewhat cooler feelings toward Asian Americans in the economic threat condition vs. the neutral condition), suggesting that the manipulation produced the expected pattern of findings, although they did not reach a conventional level of significance.

To expand upon the Butz and Yogeeswaran (2011) study, the current study explored the effect of an additional manipulation aimed at creating a direct economic threat from Asian Americans. Toward this aim, after exposure to the manipulation of general threat, participants encountered a subsequent graph that was intended to portray Asian Americans as securing future employment at a rate greater than or less than Whites, and hence a relatively strong or weak threat to economic resources for Whites. It was predicted that participants would respond with particularly high levels

of prejudice against Asian Americans upon exposure to the economic threat

information and the portrayal of Asian Americans as a relatively strong vs. weak

economic threat. Contrary to this hypothesis, no interaction was found between

General Threat and Group Threat, which indicates that the combination of economic

threat and strong threat from Asian Americans did not amplify prejudice relative to

the other conditions.

Upon further analysis of the data, a connection between individual income and

prejudicial attitudes toward Asian Americans was observed. When controlling for

participants' income, prejudice toward Asian Americans in the general economic

threat condition was greater upon exposure to the strong threat from Asian Americans

compared to the weak threat from Asian Americans. This was not the case in the

violence and the neutral conditions. Thus, these results indicate that the combination

of a general state of economic threat and a strong threat from an outgroup yielded the

predicted effect of heightened prejudice against Asian Americans upon controlling for

the influence of income on prejudice. However, similar results were found when

examining participants' responses to African Americans following exposure to the

Group Threat and economic threat conditions, indicating that contrary to arguments

presented in Butz and Yogeeswaran (2011), this trend of heightened prejudice

extended to other racial/ethnic outgroups, and was not limited to prejudicial attitudes

in relation to the group portrayed as a strong threat (Asian Americans). It may be the

case that any outgroup can be seen as a viable threat to economic resources when

participants are made aware of an economic downturn and the possibility of an

outgroup overcoming the traditionally economically superior ingroup.

Beyond considering the influence of the threat manipulations on outgroup prejudice, the relationship between participants' self identification as an "American" or as a "White American" and outgroup prejudice was examined. Based on previous research by Dach-Gruschow and Hong (2006) showing that those who were placed in the mindset of identifying as an American rather than a White American reported more prejudice toward outgroup members, it was hypothesized that participants who self identified as American would report more prejudice toward Asian Americans than those who identified as White Americans. Results indicated that the degree to which participants identified as American or White American interacted with the economic threat vs. neutral condition code to predict prejudice toward Asian Americans. Analysis of other minority groups such as African Americans, Hispanics, Jews, and Gays and Lesbians found a similar pattern. Participants who scored high on the identity measure, and thus primarily identified as White Americans, reported no difference in prejudicial attitudes toward Asian Americans and other outgroups between the economic and neutral conditions. In contrast, those who scored lower on the identity measure, and thus identified primarily as American reported significantly more prejudicial attitudes toward Asian Americans and other outgroups when exposed to the economic threat condition as opposed the neutral condition. When examining how participants responded to threat, one may consider that the superordinate identity was more susceptible to the negative consequences associated with threat. In contrast to this change in prejudice, those who primarily identified as

White American did not differ in their prejudicial responses between the economic and neutral threat conditions. This shift in attitudes among American identified participants and lack of change among the White American identified participants suggests that there may be a self-protective element associated with endorsing a dual identity when exposed to threat, whereas the prejudicial attitudes of those endorsing a superordinate identity may be more vulnerable to threat exposure.

When using the neutral condition as a reference for uninfluenced prejudicial attitudes, participants who identified as American reported less prejudice than those who identified as a White American, a response that is consistent with the Common Ingroup Identity Model and counters the findings that emerged in Dach-Gruschow and Hong's (2006) work. One explanation for these results could be found in the major methodological differences between the current study and the methods in the Dach-Gruschow and Hong (2006) study. Specifically, the major difference can be found in the degree to which participants could identify as American or White American. In the Dach-Gruschow and Hong (2006) study, researchers assigned participants to either think in an American or a White American mindset whereas in the current study participants were given the option to choose between the two conditions and indicate how much they identified with one or the other. It is possible that when given the option of self identifying as American or White American, participants viewed the American option as the more inclusive identity, which was favored among individuals who possessed more egalitarian attitudes. In contrast, the "White American" option may have been perceived as a more exclusive option, in

that it is not a superordinate identity that necessarily includes members of different

races. As such, by choosing the more exclusive option, participants may have

separated themselves from other outgroups that make up the American identity. Such

an option could be favored by individuals who hold harsher views toward outgroups,

and thus typically respond with higher prejudice.

The question of why egalitarian responses were not seen among American

identified participants who were exposed to the economic threat condition may be

addressed by considering aspects of Gaertner and Dovidio's (1986) aversive racism

theory. "Aversive racism" is a term used to describe mostly liberal minded

individuals who often have negative beliefs and feelings about outgroup members,

but at the same time are aware that it is not acceptable to respond with prejudice or

biased views toward other racial groups (Gaertner & Dovidio, 1986). The egalitarian

responses observed among those who were identifying as an "American" and not

exposed to a threat are consistent with the responses of aversive racists, who tend to

provide socially desirable responses when doing otherwise could be construed as

prejudice. However, because aversive racists are committed to appearing egalitarian,

but also hold negative beliefs and feelings about outgroup members, prejudice may

"leak out" when individuals can provide justification for their prejudicial responses,

and thus feel that they can get away with responding negatively toward outgroup

members, but will not be viewed as a prejudiced person (e.g., Frey & Gaertner, 1986).

When aversive racists were exposed to the economic threat condition, and were then

later asked to consider their prejudicial attitudes toward outgroup members, they may

have evaluated outgroups more negatively because they perceived them as, in some way, responsible for contributing to the competition for resources that results in an economic downturn, and potentially as worthy of blame for playing a role in the faltering economy. Thus, perceiving outgroup members as responsible for playing a role in the poor economy may have allowed the aversive racists to respond with negativity toward outgroup members and still preserve their egalitarian self-image.

The pattern of outgroups that were the target of prejudice among American identified participants exposed to the economic threat conditions lends support to this interpretation. Self-identified Americans reported heightened prejudice in the economic threat condition vs. the neutral condition for a range of minority status outgroups including Hispanics, Gays & Lesbians, the Poor, and Jewish Americans. However, no differences were found for groups such as the Military, the Police, Democrats, and Republicans. This suggests that when primed with the threat of an economic downturn (i.e. the threat of scarcity of economic resources), Caucasians who identify as American (and may be aversive racists) harbor prejudicial attitudes toward a range of perceived minority outgroups, indiscriminate of stereotypes, as any of these group could have the potential to compete for diminishing economic resources and thus deserving of blame. For example, in the case of stereotypes about Hispanics, Caucasian Americans have been found to perceive the group as lazy and unintelligent (Fairchild & Cozens, 1981). Given the evidence that groups such as Hispanic Americans and the Poor are perceived as economically uncompetitive, one must ask why in the current study prejudicial attitudes towards these groups were less

Americans reported no such prejudicial attitudes toward perceived outgroups, and in

fact reported less prejudice toward Jews when presented with the Economic threat

when compared to the neutral condition. Overall, these results looking at prejudicial

attitudes beyond the target group of Asian Americans provides further support for

research by Dach-Gruschow and Hong (2006) and Gaertner and Dovidio (2000) that

suggests by identifying as American, Whites exclude other "non-white" groups from

the American identity.

Inclusiveness in the American Identity

Another purpose of this study was to examine the effect of inclusion of Asian

Americans in the American identity on prejudicial responses, overall and as a

function of exposure to the threat conditions. Based on previous research regarding

the Common Ingroup Identity Model (Gaertner, Dovidio, Anastasio, Bachman, &

Rust, 1993), it was hypothesized that those who strongly identified as "American,"

and potentially also excluded outgroups in the American identity would report more

prejudice toward Asian Americans. Additionally, based upon the CIIM, endorsing a

superordinate identity and strongly including outgroups in the American identity was

posited to be optimal for reducing prejudice. Inconsistent with this hypothesis, the

results did not reveal any significant main effects of inclusion of Asian Americans on

prejudice against Asian Americans or interactions between ratings of the

inclusiveness of Asians in the American identity and the threat conditions in

predicting prejudice. This, however, was not the same for African Americans and

Hispanics. For African Americans, the more participants included them in the

American identity, the more positive they felt toward them in the General violence condition, suggesting that inclusion in the American identity is associated with low levels of prejudice toward African Americans when exposed to a threat that is related to the content of the stereotype about African Americans (i.e., violence). This is consistent with the findings reported in Gaertner et al. (1993) suggesting that the permeability of one's group (i.e. the degree to which ingroup members are willing to include outgroup members) can influence prejudicial attitudes toward outgroup members. For Hispanics, identity was associated with lower levels of prejudice overall. However, examining the possibility that identity orientation interacted with inclusion of outgroups in the American identity to predict prejudice (which provided a stronger test of the Common Ingroup Identity Model) did not yield any significant interactions involving these factors. Thus, although there was some evidence that inclusion of African Americans in the American identity was associated with more positive responses when threatened, and inclusion of Hispanics in the American identity was associated with less prejudicial attitudes, the general pattern of findings did not provide strong support for the idea that endorsing the "American" identity and also perceiving outgroups as strongly included in the American identity is optimal for reducing outgroup prejudice.

Limitations and Future Directions

Given the lack of support for the primary hypotheses, it is important to consider potential limitations of the design and procedure. The first major limitation to the current study is the low sample size, which reduces the power of a study, and

may therefore reduce the ability to detect main and interactive effects involving the

general threat and group threat manipulations. Although the initial recruitment

number was well above the desirable sample size, more participants needed to be

removed from the study than was previously anticipated. The major issue among

participants that warranted their removal for analysis was undesirable comprehension

or inaccurate interpretation of the trends presented in the graphs used as part of the

General Threat and Group Threat manipulations. Most common were simple

misinterpretations of what the graphs were depicting. For example, in the Group

Threat condition, many participants interpreted the graphs to be either graduation

rates of groups from Morehead State University or as the rate of groups being

employed by Morehead State University. To correct this discrepancy, future studies

using graphs as a means to convey threat should be piloted to assess the degree to

which participants fully understand and comprehend the information depicted in the

figures.

In the present study, inconsistent with prior findings (e.g., Butz &

Yogeeswaran, 2011), the general threat manipulation did not significantly heighten

prejudice against Asian Americans. Additionally, the group threat manipulation did

not significantly influence prejudicial attitudes toward Asian Americans. Although

one possibility is that this could stem from a failure of the manipulations, the

inclusion of checks of the General and Group Threat manipulations found that the key

threat conditions (i.e. economic threat, , strong outgroup threat) were significantly

more threatening than the respective control stimuli (i.e. neutral threat, weak outgroup

threat). One explanation as to why the manipulations failed to yield the predicted

effect on the measure of prejudice against Asian Americans is that although the threat

stimuli were considered to be more threatening than the control variables, they still

may not have been threatening enough. For example, on the scale measuring the

intensity of threat, participants rated how threatened they felt by the presented graph

on a seven point Likert scale, one indicating no threat, seven indicating very

threatening. Analysis of the means reveled that even the most threatening figure (i.e.

the economic threat condition) produced a level of threat that fell just above the

midpoint score of "four," suggesting that although the level of threat between the

threat and neutral condition was significant, the degree to which the threat conditions

were actually threatening may not have been salient enough to alter prejudicial

attitudes toward Asian Americans.

The concept of aversive racism may also provide insight into why the

threatening stimuli did not produce changes in prejudicial attitudes toward Asian

Americans. In the case of the current study, it is possible that the threat manipulations

depicting Asian Americans gaining more employment than Whites and the feeling

thermometer assessment of prejudice may have been too direct, and triggered a

socially desirable response from participants when not exposed to a threat and only

led to prejudicial responses when participants could provide justification for their

responses. That is, participants not exposed to any threat may have been aware that

rating outgroups very low on the feeling thermometer scale would represent

prejudicial responding, and their desire to appear non-prejudiced led them to provide

more moderate responses. Future work should take into account the possibility of aversive racism, possibly by creating implicit assessments of prejudice toward Asian Americans and examining whether implicit attitudes toward Asian Americans become more negative upon exposure to the economic threat manipulation coupled with the information portraying Asian Americans as a strong economic threat.

In the current work, one way in which the manipulation was checked involved examining open-ended responses to questions about the trends in the presented graphs. Review of open-ended responses to the graph interpretations revealed an alternative explanation that may account for this lack of difference in reported prejudice between the strong and weak threat conditions. Many of the participants reported the trends of Asian Americans and White Americans employment together rather than separate. For example, participants reported both Asian Americans and White Americans gaining the most employment while African Americans and Hispanics were receiving the least. In the Weak threat condition, participants failed to report this grouping of Asian Americans with White Americans, often singling out Whites as the most employable, followed by Asians, and finally African Americans and Hispanics. This suggests that when presented with the strong outgroup threat graph, participants may have grouped Whites with Asians as a means to mitigate the stress and threat of an outgroup receiving more economic resources than their ingroup. Future research should examine the extent to which ingroup members will "attach" themselves to a successful outgroup as a means to reduce threat or increase a sense of security.

An additional possibility regarding the lack of difference in scores between the two conditions is potentially the graphs themselves. When looking at Asians and Whites, in the Strong threat condition, Asian Americans were always projected as more employable than Whites; however the gap between the two was projected to increase over time. Although the prospect of falling behind a competitive outgroup was thought to be enough to elicit a prejudicial response, that did not appear to be the case. As such, a suggested change to the graph for future use would be to depict Asian Americans, at some point in the projection, to be going from less employable than Whites, to more employable, essentially overtaking Whites as the most employable group. Coupling this "fall from status" to a competitive outgroup with the projection of further discrepancy between the two groups may be enough to elicit the predicted threat prejudicial response.

Another potential limitation of the current study could be the demographics of the location in which the study took place. Morehead State University is located in Morehead, KY, which is situated in eastern Kentucky. According to recent census data, Whites make up 93.2 percent of the population, while Asian Americans make up 1.3 percent (Census, 2010a). Furthermore, Whites make up 87.8 percent of the overall population in Kentucky, while Asians make up 1.1 percent (Census, 2010b). This is significant in the sense that in the current study the Group Threat manipulation presented a scenario in which Asian Americans were obtaining more employment than their White American counterparts. Although initially presumed to be a salient means to produce outgroup threat through economic competition, the prospect that

participants may have been aware, either factually or through personal experience,

that the current region is overwhelmingly White American was not accounted for. As

a result, participants may have viewed the competition of Asian Americans as a

possible, yet not likely threat. If participants intend to remain in the region (i.e.

Morehead or Kentucky) they may not interpret the threat of Asian Americans as

being economically competitive based on the fact that Asian Americans make up such

a small proportion of the Kentucky demographics. As such, the threat of economic

competition from Asian Americans may have been more salient in a region where

interaction with Asian Americans is more commonplace among students, and

generally where the Asian American population is more robust.

For future work examining group threat in regions such as Morehead, KY that

lack racial diversity, it may be more productive to examine the effect of non-racial

threats toward ingroup economic security, values and traditions. For example, a

strong, non-racial ingroup in Morehead State University is those who are residents of

Kentucky or consider themselves to be "in-state" students. Although making up a

large majority, some students that attend MSU are either out-of-state or international

students. Though a great deal of work has examined intergroup relations, it would be

interesting to examine prejudicial attitudes of in-state ingroup members toward out-

of-state individuals after being primed with the threat of more economic resources

being allocated to out-of-state individuals. Building upon this notion, future research

could examine the prejudicial attitudes of ingroup members when the perceived threat

is from a member that is considered to be both part of the ingroup and part of an

outgroup. For example, would a non-race based outgroup threat (i.e. an out-of-state competitor) to economic resources provoke prejudicial attitudes if the target outgroup was included in the participants' ingroup? Conversely, could prejudicial attitudes toward a racial outgroup threat to economic resources be abated if the target outgroup was also seen as part of an ingroup member's social culture or environment? This research would provide insight into how some aspects of outgroups evoke more threat responses than others, as well as whether awareness of intergroup similarities can guard against prejudicial attitudes as a result of intergroup differences.

Aside from the suggested changes to be made due to potential limitations, future work should further explore the influence of identity, particularly individual differences in self group identification and how it may influence prejudicial attitudes toward threatening outgroups. A major difference between the current study's work with identity and the research by Dach-Gruschow and Hong (2006) is the manipulation of identity. Dach-Gruschow and Hong manipulated participants into responding as Americans or White Americans, whereas the current study treated identity orientation as an individual difference variable, and therefore did not include a manipulation of identity orientation. Similar to Dach-Gruschow and Hong (2006), future studies could include a manipulation in which participants adopt a mindset of American or White American before being exposed to the General Threat or Group Threat information. Results from such a study would provide a more stringent test of whether endorsing a superordinate "American" identity encourages prejudice toward potentially competitive racial outgroups when under threat.

Conclusion

The current study, building on previous research by Butz and Yogeeswaran (2011), examined the effect of both general and targeted economic threat on views toward Asian Americans, a group often stereotypically seen as economically competitive (i.e. intelligent, hard working) (Maddux et al., 2008). Counter to predictions, prejudice against Asian Americans was not heightened upon exposure to the economic threat and the strong group threat. However, such a pattern of findings was evident upon controlling for individuals differences in participants' income. Furthermore, the current work considered the influence of perceived inclusiveness of Asian Americans in the American identity, as well as the influence of self selected identity of participants as American or White American on prejudicial attitudes toward Asian Americans. Participants who primarily identified themselves as American reported marginally more prejudicial attitudes toward Asian Americans when presented with the economic threat condition compared to those exposed to the neutral condition. In contrast, the economic threat manipulation did not increase prejudice against Asian Americans among those who identified as White Americans. Although included less than other groups (i.e. Whites and African Americans), the inclusiveness of Asian Americans in the American identity did not relate to prejudicial attitudes, moderate the influence of the manipulations on prejudicial attitudes, or interact with identity orientation to predict prejudicial attitudes. Thus, considering the different aspects of identity, including participants' own identity orientation and their perceptions of outgroups as included in the American identity

did not provide strong support for predictions derived from the Common Ingroup

Identity Model. Future research should further explore the role of identity in

responses to economic threat by introducing an identity mindset manipulation and

examining whether participants, when instructed to adopt the mindset of the

superordinate "American" identity, respond with heightened prejudice against Asian

Americans in the wake of economic threat.

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Footnotes

[1] Reduced degrees of freedom in the general economic threat condition reflect missing data for two participants.

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Table 1

Prejudice Against Asian Americans as a Function of General Threat and Group Threat

General Threat	Group Threat					
	Strong			Weak		
	Mean	Std. Deviation	n	Mean	Std. Deviation	n
Economic	6.412	1.326	17	7.263	1.727	19
Violence	7.105	2.514	19	6.722	2.492	18
Neutral	7.450	2.282	20	7.059	1.983	17
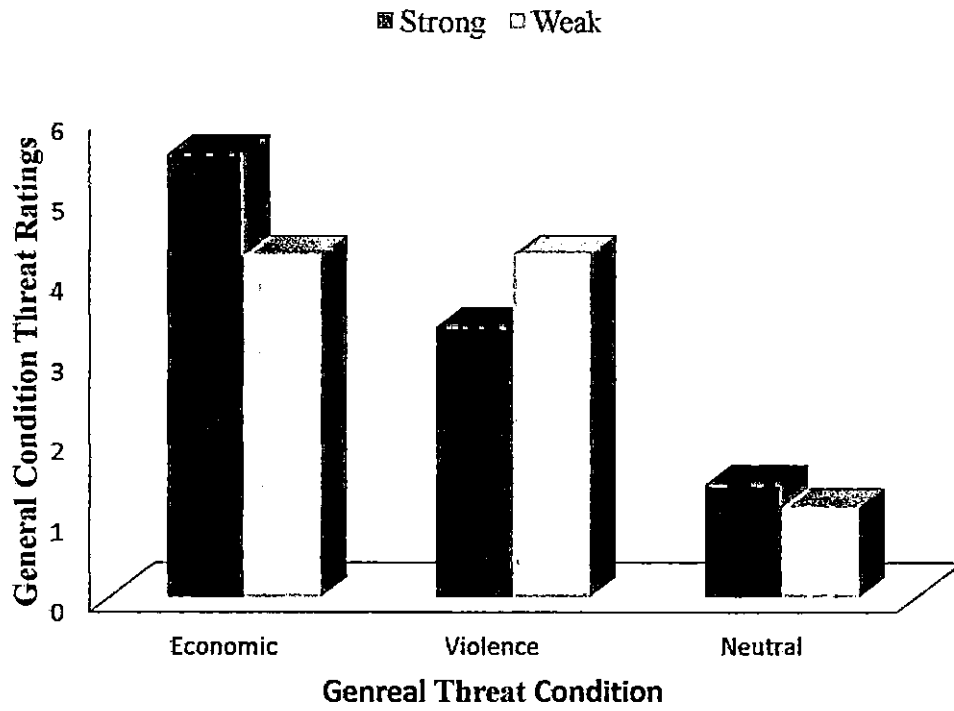
Figure 1. Threat ratings of General Threat condition stimuli when also exposed to Group
Threat condition stimuli.
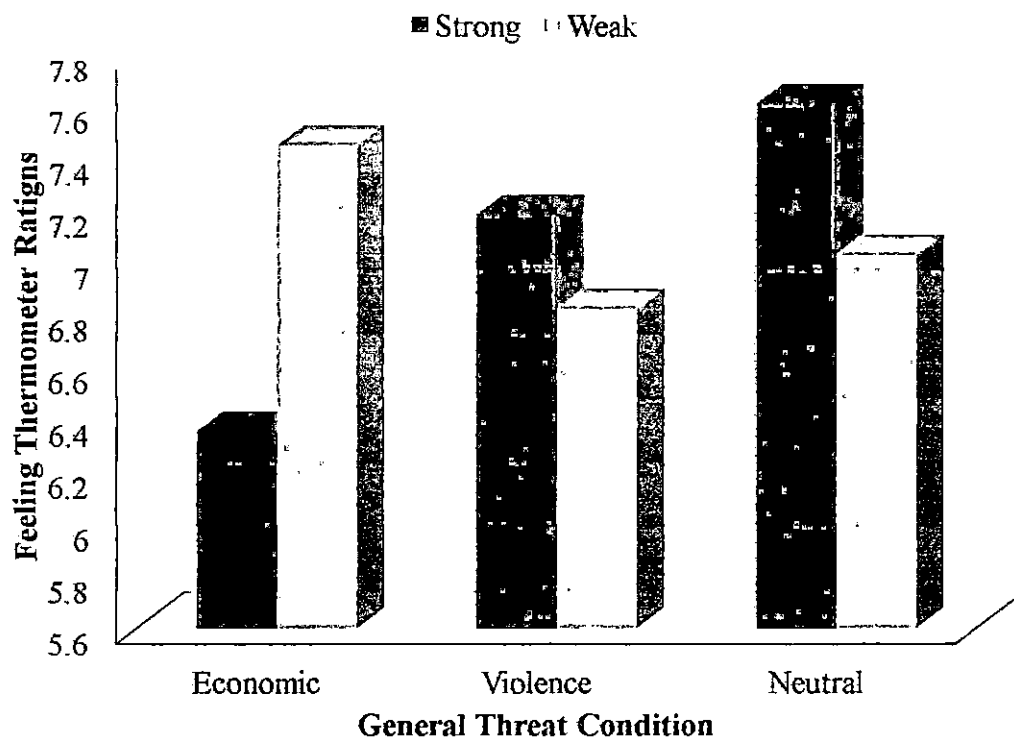
Figure 2. Prejudice against Asian Americans as a function of General Threat and Group threat conditions. Means are adjusted for the effect of income levels on prejudice.
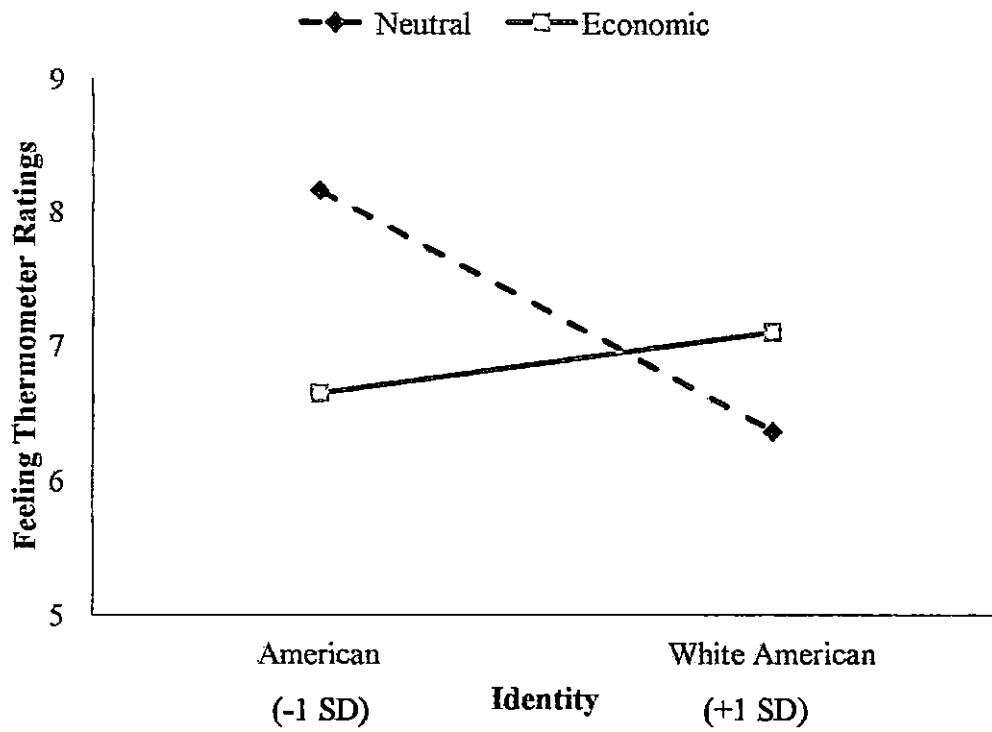
Figure 3. Prejudice against Asian Americans as a function of identity orientation and general threat condition.
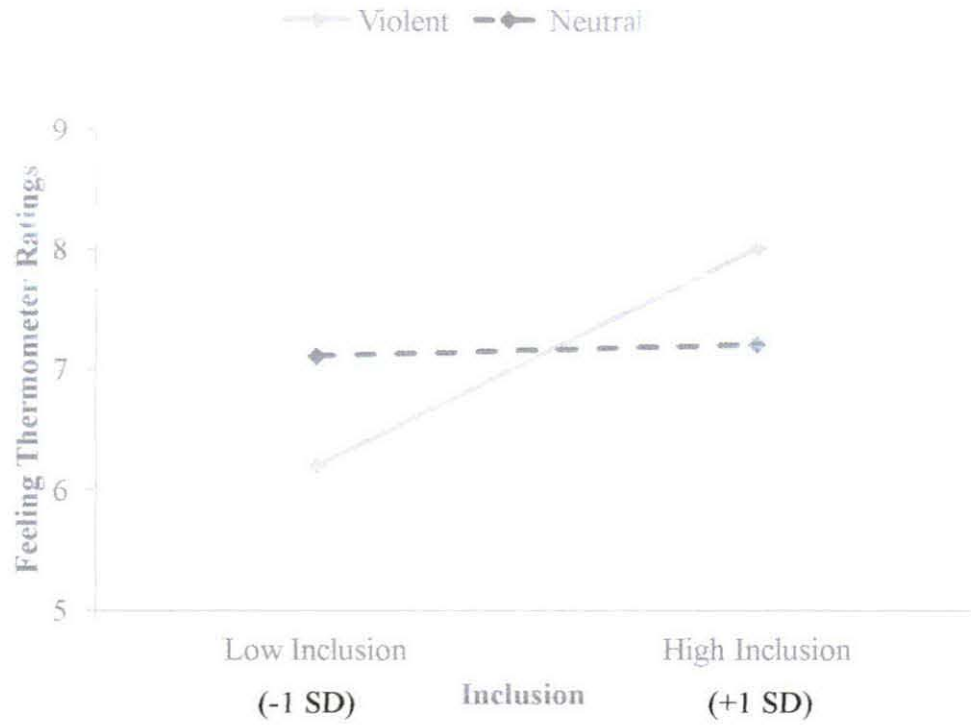
Figure 4. Prejudice against African Americans as a function of inclusion in the American identity and general threat condition.

Appendix A
Department of Psychology
Morehead State University
Morehead, KY
(606) 783-2981
INFORMED CONSENT STATEMENT:
"Graph Interpretation and Comprehension"

This research is being conducted by David A. Butz and Aaron E. Haas, researchers in the *Psychology department at Morehead State University. You must be at least 18 years of age* in order to participate. The purpose of this research is to understand of the relationship between skills assessed through graph comprehension and the nature of social opinions. As part of this project, you will be asked to review a series of graphs, indicate your interpretation of the graphs, and respond to a brief survey on your social attitudes.

Your participation is totally voluntary and you may stop participation at any time. You are free not to answer specific items or questions, or to complete any part of the survey. It is expected that it will take approximately 30 minutes to complete the survey. You will receive 1 (one) research credit for your participation. If you decide to stop your participation today you will not be penalized. You may choose to do something else for credit in your psychology class in consultation with your instructor.

Your responses today will remain confidential to the extent allowed by law. Your name will not appear on any of the results. No individual responses will be reported. Only group findings will be reported. We are required by law to report to the proper authorities any information that a person under the age of 18 is being abused or neglected by a family member, and/or that physical abuse has occurred between married persons. Aside from those cases, only members of the research team will have access to your responses. While data are *being collected, data will be kept on a secure website. Upon completion of this study, data* will be transferred to laboratory computers in Reed Hall and will only be able to be accessed by members of the research team.

Participating in this research is not expected to pose more than minimal risk. This study has been reviewed to determine that it poses little or no threat to participants, and there appear to be minimal risks or discomfort associated with completing any part of the study. Your responses will be assigned a random identification number to ensure that your responses remain completely anonymous and cannot be tied back to your name. Your instructor will be notified of your participation in order to assign course credit, however he/she will not have access to any of your responses from the study.

There are benefits for participating in this research project, for example, reflecting upon and *gaining insight into the quality of your understanding of graphs and the nature of your social* attitudes. You will also be providing researchers with valuable knowledge about the relationship between one's understanding of graphical depictions of data and social attitudes.

You may contact Dr. David A. Butz, in the Psychology department (606) 783 – 2313 or (606) 783-2981 or Aaron Haas, a research assistant, (aehaas843@gmail.com), if you have any questions about the project, either now or later. If you feel discomfort because of your participation in the study, you are encouraged to contact Dr. David Butz, the MSU Counseling and Health Services Center (112 Allie Young, 606-783-2123) or Pathways, Inc. in Morehead (606-784-4161).

I have read and understood the explanation of the study and agree to participate. I understand that by signing and dating this form I have given my consent to participate in the study.

_____   _____
Print Name   Signature

_____
Date

Appendix B

General Instructions: The following sections contain items assessing basic demographics information, knowledge and opinions about current national events and local campus events. *Please answer as openly and honestly as possible.* There are no right or wrong answers. Your responses are completely voluntary - you may skip any questions or items within this survey.

Part I. Demographics

Age: _____   **Gender** (circle one):   Male   Female
                                                                              Other

Year in School (circle one):   Freshman   Sophomore   Junior   Senior
         Other

<u>**Religious group**</u> **that you identify with (circle one):**

Protestant   Catholic   Jewish   Buddhist
                          Islamic

Agnostic   Atheist   Other:_____

Race (circle one):

Caucasian   African-American   Asian-American   Hispanic

Other (please specify): _____

On the scale below please indicate which variable you identify with the most by circling a corresponding number.

<u>American</u>   <u>White American</u>
            1   2   3   4   5   6   7   8   9   10

Birthplace and Nationality: I was (fill in one):

Born in the U.S. in (town) _____ , (state)_____

Born in another country (Please list country) _____

If you were born in another country, how many years have you lived in the U.S.?

_____

Political View

1	2	3	4	5	6	7
very liberal	liberal	slightly liberal	middle of the road	slightly conservative	conservative	very conservative

_____ General political view   _____ Foreign policy issues

_____ Economic issues   _____ Social issues

I would characterize myself as (circle one):   Democrat   Republican   Other

Who/what primarily pays for your education? (Provide a percentage response for each of the categories listed below. If a category is not applicable, please put a zero on that line.). **All four categories should sum to 100%.**

Self	Parents/Guardians	Scholarships	Loans
_____ %	_____ %	_____ %	_____ %

What is the annual income of the individual/household that pays for your education? (Circle one)

(1) $0-$8350   (2) $8350-$33,950   (3) $33,950-$82,250

(4) $82,250-$171,550   (5) $171,550-$372,950   (6) $372,950+

Using the scale below, rate each of the follow groups according to the following questions. You may skip any item/s in this section.

| 1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neutral	Agree	Agree Somewhat	Strongly Agree

"When I think of an **American,** I think of a..."

_____ 1. Hispanic/Latino/Latina person

_____ 2. Black/African-American person

_____ 3. White/Caucasian person

_____ 4. Asian-American person

Appendix C

General Threat Manipulation: Economic Threat Condition

Instructions: Below is a graph representing the level of unemployment in the United States by demographics. Please take a moment to review the information provided in the graph. After looking over the graph, please write one to two sentences about the trends over time represented in the graph.

Average Percent of Unemployed in the United States
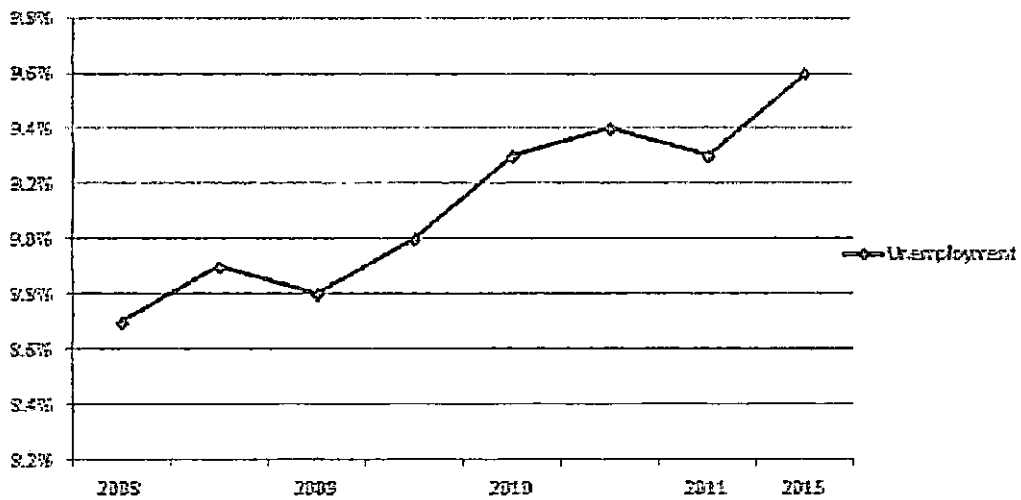
General Threat Manipulation: Non-Economic Threat (Crime) Condition

Instructions: Below is a graph representing the level of violent crimes in The United States. Please take a moment to review the information provided in the graph. After looking over the graph, please write one to two sentences about the trends over time represented in the graph.

Percent of Violent Crimes in The United States

General Threat Manipulation: Neutral Condition

Instructions: Below is a graph representing the population of squirrels in The United States. Please take a moment to review the information provided in the graph. After looking over the graph, please write one to two sentences about the trends over time represented in the graph.
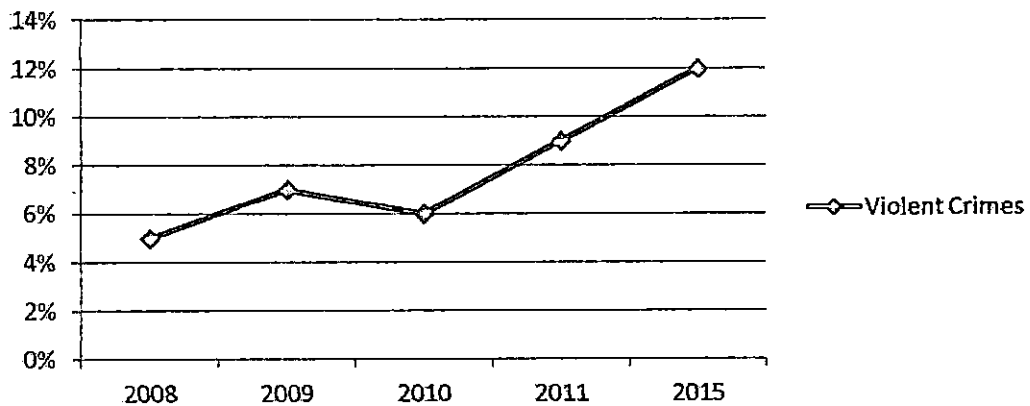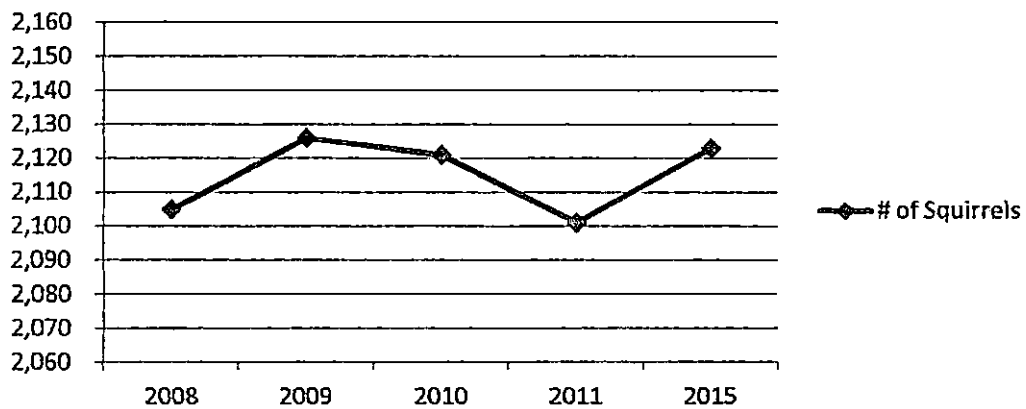
Population of Common Squirrel in The United States (in millions).

Appendix D

Group Threat Manipulation (Strong Threat from Asian Americans)

Instructions: Below is a graph representing the level of employment levels of recent Morehead State University graduates by demographics. Please take a moment to review the information provided in the graph. After looking over the graph, please write one to two sentences about the trends over time represented in the graph.

Employment of MSU Graduates after Graduation

Group Threat Manipulation (Weak Threat From Asian Americans)

Employment of MSU Graduates after Graduation
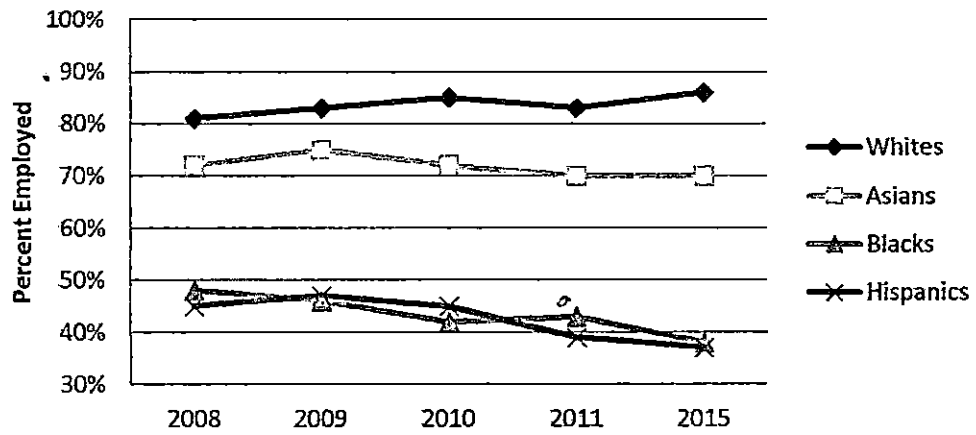
Appendix E

Filler Graph

Instructions: Below is a graph representing the level of attendance at Yellow Stone National Park by demographics. Please take a moment to review the information provided in the graph. After looking over the graph, please write one to two sentences about the trends over time represented in the graph.
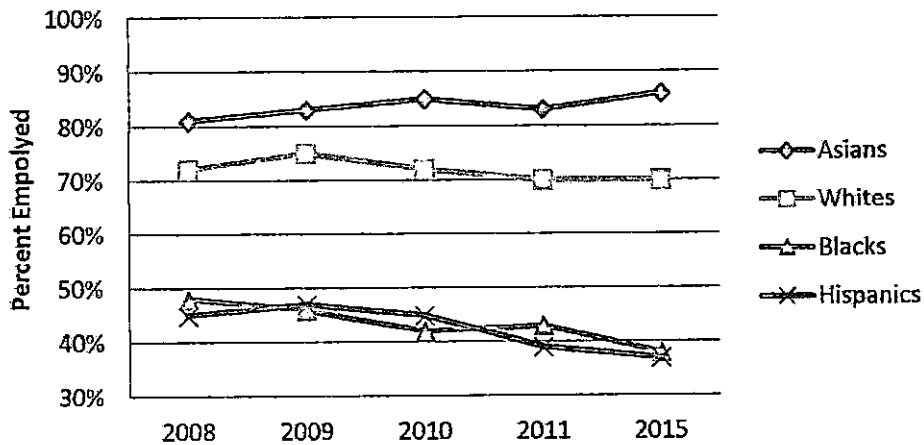
Average Attendance at Yellowstone National Park (by Thousands) Department of National Resources

Asians   Whites   Blacks   Hispanics

Appendix F

Feeling Thermometer

1. We would like you to rate the groups below using something called the feeling thermometer. You can choose any number between 0 and 100. The higher the number, the warmer or more favorable you feel toward that group; the lower the number, the colder or less favorable. You would rate the group at the 50 degree mark if you feel neither warm nor cold toward it.
Using the feeling thermometer, how would you rate:

	0 degrees	10	20	30	40	50	60	70	80	90	100 degrees
Military	○	○	○	○	○	○	○	○	○	○	○
Democrats	○	○	○	○	○	○	○	○	○	○	○
Farmers	○	○	○	○	○	○	○	○	○	○	○
Blacks/African Americans	○	○	○	○	○	○	○	○	○	○	○
Environmentalists	○	○	○	○	○	○	○	○	○	○	○
Jews	○	○	○	○	○	○	○	○	○	○	○
Asian Americans	○	○	○	○	○	○	○	○	○	○	○
Poor	○	○	○	○	○	○	○	○	○	○	○
Feminists	○	○	○	○	○	○	○	○	○	○	○
Hispanic/Latinos/as	○	○	○	○	○	○	○	○	○	○	○
Police	○	○	○	○	○	○	○	○	○	○	○
Republicans	○	○	○	○	○	○	○	○	○	○	○
Gays/Lesbians	○	○	○	○	○	○	○	○	○	○	○

Appendix G

Debriefing

Thank you for your participation in this research project. The primary purpose of the present study was to examine the impact of economic threat and group threat on outgroup attitudes. Participants were randomly assigned to conditions in which they were exposed to graphs depicting either a steep increase in unemployment, a steep increase in crime, or a steady trend reflecting an animal population. The purpose of these graphs was to introduce thoughts about the worsening economy, an increase in crime, or a more neutral topic (animal population). Thus, depending upon the condition you were in, you encountered a graph of one of these types. Additionally, we varied information about the extent to which certain groups are posing an economic threat. Some participants also received a graph indicating that Asian Americans would be outpacing Whites in securing employment, whereas others receive a graph depicting the opposite pattern in which Whites are surpassing Asian Americans in securing employment. We believe that exposure to information about the worsening economy and information about Asian Americans' success in securing jobs may lead to more negative attitudes toward that group compared to attitudes reported among individuals in the other conditions. Thus, after encountering the series of graphs, all participants evaluated a series of outgroups using a Feeling Thermometer, which allows us to assess the positivity or negativity of attitudes toward various groups, including Asian Americans.

It is important to note the graphs presented in this study were fabricated for purposes of this research study, and are not meant to be representative of actual projections. Additionally, we would like to reiterate that your responses on the questionnaires will be completely anonymous and have only been labeled with an ID number that cannot be tied back to personal identifying information such as your name. Upon the conclusion of this study, we will be examining average responses in each of the experimental conditions and will not be focusing on individual responses in our analyses. Thus, only findings that we obtain among groups of individuals will be reported.

We greatly appreciate your participation in this study. If you should have any questions about the procedures or comments on the study, you may contact Dr. David A. Butz, Morehead State University, Department of Psychology, 434 Reed Hall, 783 – 2313, d.butz@moreheadstate.edu; or Aaron Haas aehaas843@gmail.com, for answers to questions about this research or your rights. If you feel discomfort because of your participation in the study, you are encouraged to contact Dr. David Butz, the MSU Counseling and Health Services Center (112 Allie Young, 606-783-2123) or Pathways, Inc. in Morehead (606-784-4161).

To learn more about recent work on economic threat see:

Butz, D., & Yogeeswaran, K. (2011). A new threat in the air: Macroeconomic threat increases prejudice against
     Asian Americans. *Journal of Experimental Social Psychology, 47,* 22-27.

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