FIGHT OR FLIGHT: THE FUNCTIONAL SPECIFICITY OF EMOTIONS AND RESULTING EFFECTS ON ATTITUDE-BEHAVIOR CONSISTENCY

by

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Introduction

Previous research has identified numerous factors that moderate attitude-behavior consistency (e.g., Fazio & Zanna, 1981; Fazio, 1986; Petty & Kronsick, 1995). According to Attitude Representation Theory (ART), attitude-behavior consistency depends on the degree of match between aspects of the behavioral situation and aspects of the individual's representation for the attitude object (Lord & Lepper, 1999). An individual's representation for an attitude object includes aspects that are cognitive, behavioral, and affective. Affective aspects of an attitude representation increase attitude-behavior consistency to the extent that they are consistent with the individual's overall evaluation of the attitude object. In previous studies (e.g., Norman, 1975; Rosenberg, 1960) that have examined the impact of affective-cognitive and affective-evaluative consistency on the attitude-behavior relationship, the affective component has been measured on only one dimension: its valence or pleasantness (e.g., Eagly, Mladinic & Otto, 1994). In research on emotions (e.g., Plutchick, 1994; Russell, 1997), however, numerous theorists posit that emotions have specific links to specific types of actions. The present experiments addressed whether two emotions that are both negative (fear and anger) might have implications for different types of attitude-relevant behaviors (approach-avoidance vs. reward-punishment).

Moderators of Attitude-Behavior Consistency

Previous research has identified numerous factors that moderate attitude-behavior consistency (E.g., Eagly & Chaiken, 1983; Fazio, 1986). Some of those factors, such as past experience and accessibility, involve the strength of the attitude. Attitudes that are important to the individual, based on experience, and relatively accessible, tend to be more strongly held than weaker attitudes. Other factors involve the compatibility of the attitude with the behavioral

opportunity. Attitudes tend to predict behavior better when aspects of the attitude match versus mismatch aspects of the behavioral situation (Lord & Lepper, 1999).

Attitude Strength. The three major aspects of an attitude that make it strong are its importance to the individual, the extent to which it is based on direct or first-hand experience, and the extent to which it comes readily to mind. Importance involves vested interest, ego-involvement and latitudes of acceptance. People who have a vested interest in the attitude tend to have attitudes that are strongly held (Sivacek & Crano, 1982). A death-row inmate, for example, would probably have a more strongly held attitude against capital punishment than someone who is not awaiting execution. People whose ego or sense of self is highly involved in their attitudes, racial bigots who feel better when they scapegoat, for example (Allport 1954), tend to have attitudes that are more strongly held compared to people whose ego or sense of self is not highly involved in their attitude. In addition, people who are willing to accept only a very narrow range of attitudes have been shown to have attitudes that are relatively strong (Sherif, Sherif & Nebergall, 1965).

The amount of direct or first hand experience that an individual has with an attitude object also contributes to attitude strength by increasing knowledge and confidence. People who have direct experience with the attitude object tend to have attitudes that are strongly held (Fazio & Zanna, 1981). Someone who has a family member that is living with AIDS would most likely have a more strongly held attitude toward people infected with the HIV virus, than someone who has only vicarious or indirect experience with HIV victims. Direct experience, in turn, tends to increase a person's knowledge about the attitude target (e.g., social group, social policy). People who know more about an attitude object tend to have attitudes that are more strongly held (Kallegren & Wood, 1978). Dieticians, for example, would probably have both more knowledge and more strongly held attitudes than would 'novices' toward advertisements

that promote a dangerously under-weight female shape. Finally, direct experience and knowledge increase confidence in one's attitudes (Fazio & Zanna, 1978).

The third major aspect of attitude strength lies in the extent to which the attitude readily comes to mind in a variety of situations (Fazio, 1990). Accessible attitudes (those that readily come to mind) predict behavior and resist attitude change better than those that are relatively inaccessible. Homophobics, for example, might find cues to another person's sexual orientation especially salient, so their attitudes toward gays would come readily to mind. They would also be more likely than others to act on those attitudes. People who have highly accessible attitudes also tend to have attitudes that are more likely to be activated automatically by the attitude object (Fazio, 1986; Bargh, Chaiken, Govender & Pratto, 1992). Chain-smokers, for instance, might automatically associate cigarette smoke with pleasant experiences. Every time they light a cigarette, they get a feeling of satisfaction that colors their perception of ongoing events. Obviously, an attitude that is based on such strong associations would dictate consistent behavior and create an attitude that is very difficult to change. As with importance and first hand-experience, attitude accessibility increases attitude strength and attitude-behavior consistency (Petty & Krosnick, 1995). People who have stronger attitudes behave more in line with their attitudes than people who have weaker attitudes.

Compatibility. In addition to attitude strength, attitude-behavior consistency is also affected by the compatibility of the attitude with the behavioral situation. According to the specificity-matching principle (Ajzen & Fishbein, 1980), one way to improve the correlation between attitudes and behavior is to measure attitudes with specific rather than general attitude questions. If attitude questions are to predict specific behaviors, they must match the behavior in four ways: target, action, context and time. If a researcher wanted to predict donating money (action) to the gay alliance (target) on campus (context) tomorrow (time), for example, it would

be better to have the attitude question specify these four aspects than to ask a general question such as, "What is your attitude toward gay men?"

Finally, Millar and Tesser (1986) found that attitudes better predict behavior when the focus of the measured behavior matches the way the person focused on the attitude object when the attitude was formed. Millar and Tesser (1986) manipulated students' focus while they formed attitudes toward a set of analytical puzzles. They gave each of the students a set of analytic puzzles and asked them to familiarize themselves with the puzzles by trying to solve them so that the puzzles would later be familiar enough for the students to evaluate them. At the same time, students were also asked either to focus on why they could like or dislike each puzzle or on how each puzzle made them feel. After familiarizing themselves with the puzzles, students wrote either their reasons or their feelings toward each puzzle, followed by their evaluations of each puzzle.

The experimenter then left the students alone for a few minutes before starting the last part of the experiment, in which students believed they would be taking a test that either focused on analytical ability or on socialization sensitivity. The behavioral measure toward the attitude object (puzzles) was measured as the amount of time spent playing with the puzzles during the break in between "sessions." Students who believed they were about to take a test that focused on analytical ability had a higher attitude-behavior correlation when they had focused on reasons why they could like or dislike the puzzles when forming their attitude toward the puzzles. In the same manner, students who believed they would be taking a test that focused on feelings (social sensitivity), behaved more in line with their attitude toward the puzzles when they had focused on how the puzzles made them feel when forming that attitude. Attitude-behavior consistency was better when the focus at Time 1 was compatible with the focus at Time 2 (See also Ajzen & Fishbein, 1980; Eagly & Chaiken, 1983).

Attitude Representations

According to Attitude Representation Theory (Lord & Lepper, 1999), attitude-behavior consistency depends on the degree of match between aspects of the behavioral situation and aspects of the individual's representation for the attitude object.

Principles of The Theory. Based on the early attitude research of both LaPiere (1934) and Asch (1940), attitude representation theory was formulated to address how and when people will act according to their attitudes. Past research on attitude-behavior consistency has also studied moderator variables (Ajzen & Fishbein, 1980). Instead of testing whether attitudes predict behavior, modern researchers try to discover when attitudes predict behavior (Fazio & Zanna 1978). Modern theories of attitude change such as the Elaboration Likelihood Model (Petty & Caccioppo, 1986), and the Heuristic Systematic Model (Chaiken, Liberman & Eagly, 1989), also focus on moderator variables. The Elaboration Likelihood Model and the Heuristic Systematic Model explain in great detail the precise cognitive processes that people use when encountering new information about the attitude object.

Other current models of attitude change, however, describe the processes by which attitudes can be changed from within, without any new information (McGuire & McGuire, 1991; 1996). When people focus on previously non-salient aspects of their personality, for example, they can change their attitudes toward themselves without acquiring any new information (McGuire & McGuire, 1996).

Lord and Lepper's (1999) Attitude Representation Theory (ART) explains both attitude-behavior consistency and attitude change using the same principles. Each evaluative response occurs through the same process. When people encounter an attitude object, they activate specific aspects of an attitude representation. The attitude representation (e.g., of politicians) includes exemplars (e.g. George W. Bush), characteristics (e.g. gregarious), past actions (e.g.

vote for one) and emotions (e.g. depressed). When people encounter an attitude object, they also activate aspects of the immediate situation, which can involve exemplars, characteristics, available actions and emotions. Two evaluative responses (e.g., answers on an attitude questionnaire at time 1 and at time 2, or answers on an attitude questionnaire at time 1 and a behavior toward the attitude object at time 2) match when the activated aspects at time 1 match the activated aspects at time 2. Thus, in ART, the same principles explain when attitudes will predict behavior and when attitudes will change.

Aspects of Attitude Representations. These principles of Attitude Representation Theory (ART) have generated empirical research on four aspects of the attitude object's representation: exemplars (Sia, Lord, Blessum, Thomas & Lepper, 1999), characteristics (Lord, Lepper & Mackie, 1984), actions (McIntyre, Paulson & Lord, 2003), and emotions (Seitz, Lord & Taylor, 2007). ART-inspired research on exemplars, for instance, has addressed activation and stability (Sia et al., 1999). The research on exemplar activation has shown that people activate their exemplars when they report their attitudes. In a relevant study (Sia et al., 1999; Expt. 3), participants were more likely to fill in the blank letters in an incomplete word to form the name of a politician when they had just provided their attitudes toward politicians, than when they had just provided a definition of politicians. Also, when people are surreptitiously primed with the names of politicians that they particularly like or dislike, their subsequent attitude reports change in a matching direction (Sia, Lord, Blessum, Ratcliff & Lepper, 1997; Expt. 1-2). Finally, people who have temporally unstable exemplars are also more susceptible to attitude change attempts (Lord, Paulson, Sia, Thomas & Lepper, 2004).

ART has also inspired research on characteristics as an aspect of attitude representations. The relevant research has examined both typicality and expertise. Research on typicality has shown that attitudes are unlikely to guide behavior toward targets that have atypical

characteristics. Lord, Lepper and Mackie (1984), for instance, obtained male college students' attitudes toward gay men. They also asked the students to list characteristics that they attributed to the typical gay man. Later, the researchers gave these same students an opportunity to interact with some transfer students, one of whom openly acknowledged being gay. The men's attitudes significantly predicted their willingness to interact with the gay man when his characteristics matched 100 percent what that participant thought was typical. Their attitudes did not predict willingness, however, when the gay man was atypical on 50 percent of the characteristics.

Research on expertise has shown that the typicality of characteristics matters more for novices than for experts. "Experts" who have known many gay men, for instance, act in line with their attitudes toward a gay man whether his characteristics are typical or atypical (Blessum, Lord, & Sia, 1998). "Novices" who have known no gay men personally, in contrast, display attitude-behavior consistency only toward a gay man who has typical characteristics and not at all toward a gay man whose characteristics are atypical.

Attitude Representation Theory (Lord & Lepper, 1999) has also generated research on the actions aspect of attitude representations. The relevant research has addressed action types and action specificity. Research on action types has shown that people associate only a limited set of action categories with their attitudes toward social groups (Paulson, Sadler, McIntyre & Lord, 2003). People associate some of these action types (e.g. interacting with versus avoiding) with their attitudes more frequently than others (e.g. agreeing versus disagreeing). These action types are both ways to express attitudes, but one type appears to come more readily to mind. A meta-analysis of studies that have measured attitude behavior consistency toward social groups, in fact, showed that previous studies that have used the behavioral measures involving the more frequently generated actions have also yielded larger effect sizes (Wallace, Paulson, Lord & Bond, 2005).

Research on action specificity has shown that people differ in how they label or identify their own attitude-relevant actions. Action Identification Theory (Vallecher & Wegner, 1985) had previously established that people can identify the same action at a lower level (e.g. mop the floor), a medium level (e.g. clean the house), or a higher level (e.g. get ready for company). In the same way, McIntyre, Paulson, Lord & Lepper (2004) reasoned that people might identify the same attitude-relevant action toward a social group at lower, medium or higher levels. They showed that individuals who identify their attitude-relevant actions at higher levels, either spontaneously or by manipulation, behave more in line with their attitudes than do individuals who identify their attitude-relevant actions at lower levels. The principles of Attitude Representation Theory, then, have informed numerous studies of exemplars, characteristics and actions within attitude representations.

Two dimensions. In a recent study of the emotions component of ART, Seitz and colleagues (2007) found that attitudes better predict behavior when the emotions associated with the attitude target are active rather than passive. Seitz and colleagues (2007) measured (Experiment 1) and manipulated (Experiment 2) the valence and activity of the emotions students associated with their attitudes toward gay men. Experiment 1 involved two sessions, separated by 1 week. In the first session, for each of eight attitude objects, including gay men (the target group), fraternity members, former substance abusers, politicians, welfare, capital punishment, abortion and affirmative action, participants were asked to report their attitudes on scales ranging from -5 (*very negative*) to 5 (*very positive*) and (following the procedures of Eagly et al., 1994, and Haddock et al., 1993) to list up to five emotions that they felt when they thought about each attitude object. After the attitude ratings and emotion lists had been collected, participants rated the extent to which they felt each of 12 experimenter-provided emotions (anger, terrified, rage, depression, helplessness, alienation, appreciation, enthusiasm, sociable,

calmness, comfortable, serenity) when they thought about each of the attitude objects, on scales from 0 (*not at all*) to 9 (*very much*). Next, students completed a series of additional measures for constructs including attitude strength and attitude ambivalence (c.f., Seitz et al., 2007).

In a second session, one week later, the same students, as part of an unrelated experiment, made hiring recommendations. They were told that the Psychology Department was hiring a part-time office worker who would answer telephone inquires and interact with students. Participants read background information and interview notes from three male applicants, one of whom indicated on his application form that he was gay. After reading about all three applicants, students evaluated each applicant on three 7-point scales ranging from -3 to +3 including an explicit hiring recommendation to the department chair (from "I would very much urge the department to reject the applicant" to "I would very much urge the department to accept the applicant"). The results of Experiment 1 (Seitz et al., 2007) supported their hypothesis that students who spontaneously associate relatively active self-generated or experimenter-provided emotions with an attitude object, controlling for differences in the positivity of their attitudes, display greater attitude-behavior consistency than do individuals who spontaneously associate relatively passive emotions with the attitude object.

Because the results of Experiment 1 were correlational and could not address causal relationships, Seitz et al. (2007) conducted a second experiment that involved a manipulation of emotion activity level. In Experiment 2, students were randomly assigned to describe the relationship between either passive or active emotions and their attitudes toward gay men. Students were asked to report their attitudes toward the same eight targets (including gay men) using a 10 point scale ranging from -5 (very negative) to 5 (very positive) with no midpoint. A scale with no midpoint was used so that each participant would be forced to choose either a positive (1 or higher) or negative (-1 or lower) attitude. Then, based on students' responses, the

experimenter randomly assigned each participant to be primed with either passive or active emotions. If the participant had reported a negative attitude toward gay men, he or she was randomly assigned to write three separate explanations of why gay men made people feel either three passive and negative emotions (depression, helplessness, alienation) or three active and negative emotions (anger, rage, terrified). If the participant had reported a positive attitude toward gay men, he or she was randomly assigned to write three separate explanations of why gay men made people feel either three passive and positive emotions (calmness, comfortable, serene) or three active and positive emotions (appreciation, enthusiasm, sociable). These were the same passive or active emotions that were used as the experimenter-provided emotions in Experiment 1. In all, half the participants were instructed to describe the association between gay men and active emotions, whereas half the participants were instructed to describe the association between gay men and passive emotions.

Immediately after, but in an "unrelated" experiment conducted by a different experimenter blind to the manipulation, the same participants made the same type of hiring recommendations as in Experiment 1. The manipulation of emotion activity produced the same type of interaction as had been found with the two different measures of emotion activity level in Experiment 1. Students who had been instructed to associate active emotions with gay men displayed greater attitude-behavior consistency than did students who had been instructed to associate passive emotions with gay men. Thus, the manipulation of emotion activity level produced results that converged with both individual difference measures of emotion activity level.

Action Tendencies

Other theorists have emphasized the specificity of emotions rather than their valence. They argue that emotions such as fear and anger are action tendencies that are felt as emotions

that can lead to overt behavior (Arnold, 1960; Frijda, 1986). According to Frijda (1986), emotional experience can be largely made up of experienced states of action readiness or unreadiness. In addition, Plutchick (1980) noted that emotions could be thought of as impulses to action. For example, fear leads to escape, which serves the function of protection. Anger, for example could lead to approach behavior, which serves the function of removing the imminent threat.

Theoretical links from neurobiological systems to emotion have led to the argument that two distinct motive systems, the aversive and the appetitive (approach), may underlie affective and behavioral response tendencies (Carver, Sutton & Scheier, 2000; Davidson, 1998). Some emotions, therefore, may be more inclined as action tendencies to lead to specific types of action. Fear, for example, may be more likely to evoke the response tendency of avoidance. Anger, on the other hand, may be more likely to lead to the behavioral response tendency of approach. The appetitive or "fight" related neurobiological systems may be linked to an emotional response such as anger, and result in the behavioral tendency to approach. The aversive or "flight" related neurobiological systems, in contrast, may be linked to the emotional response, fear, and result in the behavioral tendency to avoid.

Fight versus Flight

Previous research in the neurobiology of emotion and behavior has borrowed from emotion theorists' (Frijda, 1986; Arnold, 1960) suggestion that emotions such as anger and fear can be thought of as having motivational functions as well as generating action tendencies.

The emotions fear and anger, both of which are high in activity and negative in valence (c.f., Seitz et al., 2007), have been found to be very different and distinct from each other. Fear and anger have been found to be localized differently in the pre-frontal cortex for both trait and state experiences of each emotion (Harmon-Jones & Allen, 1998; Harmon-Jones & Sigelman,

2004). The activation of neurobiological systems such as the Behavioral Approach System (BAS) and the Behavioral Inhibition System (BIS) (c.f., Gray, 1972) are also different for the experiences of the emotions fear and anger (Carver & White, 1994; Carver, 2004). Finally, research suggests that anger and fear elicit different types of aggression and the corresponding behavioral tendencies to approach (fight) or to avoid (flight), respectively (Harmon-Jones & Sigelman, 2001).

Behavioral Approach System (BAS) and Behavioral Inhibition System (BIS). Gray's behavioral approach system (BAS) is responsible for approach behaviors and positive affect. Electroencephalographic and neuroimaging data indicate approach incentives tend to relate to higher activation in areas of the left prefrontal cortex, suggesting circuitry underlying approach is partially localized in these areas (Gray, 1972; 1994). Gray's behavioral inhibition system (BIS) is responsible for withdrawal and negative affect. Electroencephalographic and neuroimaging data indicate the presence of threatening stimuli tends to relate to higher activation in areas of right prefrontal cortex, suggesting circuitry underlying avoidance is particularly localized in these areas (Gray, 1972; 1994; Harmon-Jones & Allen, 1998).

BAS-Approach versus BIS-Avoidance. Previous research has investigated the activation of neurobiological systems such as the Behavioral Approach System (BAS) and the Behavioral Inhibition System (BIS) (c.f., Gray, 1972) for the experiences of the emotions fear and anger (Carver & White, 1994; Carver, 2004). Carver (2004) anticipated that the emotions fear and anxiety should correlate with the activation of the BIS. In contrast, Carver (2004) hypothesized that specific negative feelings such as anger and frustration may be more related to BAS (approach) than BIS (Inhibition or avoidance). After having all participants complete personality scales to measure sensitivity of the BIS and the BAS (Carver & White, 1994), Carver (2004) in one experiment (Study 2), asked participants to imagine being in several frustrating scenarios,

such as being evicted because their roommate violated apartment rules, finding people sitting on their new car in a parking lot, being kept from completing a paper by noisy roommate , and being accused of cheating by someone who had copied them on an exam. Next, participants reported the emotions that they were experiencing after having just imagined the frustrating scenarios. The results showed that Nervousness was predicted by BIS sensitivity (Inhibition or Avoidance) and not at all predicted by BAS sensitivity (Approach). Anger, however, was predicted better by BAS sensitivity (approach), even though the BAS scale consisted of questions about seeking rewards and none at all about feelings of anger, anger-eliciting experiences, or any negative experiences whatsoever. In Study 3 (Carver, 2004), participants who had taken the BIS/BAS scales were asked about their reactions soon after the terrorist attacks of September 11, 2001 on the World Trade Center and the Pentagon. Fear was found to be predicted by BIS sensitivity (Inhibition, Avoidance) but anger was predicted by BAS sensitivity (Approach).

The findings of Carver's (2004) Study 2 and Study 3 showed that feelings related to the Behavioral Approach System (BAS) are not always positive as was once believed. Fear and anger are more distinct emotions than once thought. Both emotions are high in activity and low in valence (negativity) which places them in close proximity on a circumplex model of emotion (Plutchik, 1994). The two dimensions, however, do not address the motivations or actions that are likely to correspond with the two different emotions. When people are afraid of something, for instance, they tend to move away from it. The more people are afraid of something, the more they are motivated to avoid it. On the other hand, when people are frustrated they behave in one of two ways: (1) they lose hope of changing the situation, experience sadness, and withdraw or (2) they retain hope of changing the situation, experience anger, and approach with the motivation to change the situation (Carver, 2004. p. 14).

The corresponding sequence with responses to members of stigmatized social groups might be that when people are afraid of the target group, they avoid its members. A similar response occurs when people are frustrated by the target group, but do not think they can change them. They are saddened and also avoid its members. When people are frustrated by the target group and think they can change something about the target group or the situation (e.g., push them out of the way), however, they approach in order to alter or remove the source of frustration.

Organization of the Prefrontal Cortex

The Approach and Avoidance behaviors found to correspond with the BAS response to Anger and the BIS response to Fear, respectively, have also been found to correspond with the organization of activity in the pre-frontal cortex during both trait and state experiences (Harmon-Jones & Allen, 1998; Harmon-Jones & Sigelman, 2001).

Trait Experience. Research on the trait experience of Fear and Anger, for example, suggests asymmetry effects in cortical activity (Harmon-Jones & Allen, 1998). Depressed individuals have decreased left-anterior cortical activity (Henriques & Davidson, 1990; 1991). Individuals high in positive affect have high and stable left-anterior cortical activity (Tomarken et al., 1992a; 1992b). In addition, individuals high in negative affect have high and stable right-anterior cortical activity. Most explanations of asymmetry effects suggest that the approach-withdrawal (directional) dimension rather than the positive-negative (valence) dimension underlies the asymmetry. Positive affective states reflect approach tendencies and negative affective states reflect withdrawal tendencies. Anger, however, has been thought to correlate with greater left rather than right activity of the prefrontal cortex, even though anger is a negative emotion and left frontal cortical activity is usually associated with positive emotions (Harmon-

Jones & Allen, 1998; Gray, 1972). This finding is consistent with the idea that anger is related to approach and not avoidance.

Harmon-Jones and Allen (1998) suspected that the dominant tendency evoked by anger might be one of approach. Darwin (1872) described anger as an emotion with approach-related tendencies, one that evokes tendencies toward aggression. In addition, Plutchick (1980) described anger as an emotional response to the blocking of obtaining an expected goal, so calling for actions that involve approach to change the situation. Studies with infants have shown greater left-anterior cortical activity during facial expressions of anger and the opposite during expressions of sadness (Dawson et al., 1992).

Harmon-Jones and Allen's (1998) research addressed the hypothesis that anger is correlated with greater left rather than right activity of the prefrontal cortex, even though anger is a negative emotion and left frontal cortical activity is usually associated with positive emotions (Dawson et al., 1992; Harmon-Jones & Allen, 1998). This prediction was consistent with the idea that anger is related to approach and not avoidance. Prior to their study, direct tests of anger were confined to studies of infants. Harmon-Jones and Allen (1998), therefore, chose to test their hypothesis using a slightly older population. Harmon-Jones and Allen (1998) measured frontal brain EEG activity in boys and girls between the ages of 11 and 17. The children then completed the Positive and Negative Affect Schedule – Children's Version (PANAS-C) (Lauren, Potter & Catanzaro, 1994), adapted from the work of Watson, Clark & Tellegen (1998) to assess positive and negative affect in children, followed by an aggression questionnaire that measured levels of trait anger (Buss & Perry, 1992).

Harmon-Jones and Allen (1998) found support for their hypothesis. Anger correlated significantly with greater left than right cortical activity. In addition, anger was predicted separately by increased left frontal activity and by decreased right frontal activity, and anger was

not at all correlated with asymmetry of activation in any other area of the brain. Individuals with high dispositional anger, therefore, have increased approach motivation and decreased withdrawal motivation. This result fit with suggestions from past research. Izard (1991), for example, suggested that anger may serve an adaptive function by counteracting fear (which would impel flight), supplying energy and determination, and preventing depression. In the same manner, anger may be useful in coping with challenges and dangers (impetus to fight).

State Experience. Research on the state experience of fear and anger also suggests asymmetry effects in cortical activity (Harmon-Jones & Sigelman, 2001). Previous research showed that trait anger is associated with left rather than right prefrontal brain activity even though most negative emotions have the opposite effects, suggesting that prefrontal asymmetrical activity is associated with motivational direction rather than emotional valence. Anger is an emotion that has been included as part of the Behavioral Facilitation System (Depue, & Iacono, 1989), a biobehavioral system similar to the Behavioral Approach System (BAS) (Gray, 1972, 1987) which is associated with relative left prefrontal brain activity (Harmon-Jones & Allen, 1998; Sutton & Davidson, 1997). The evidence for this suggestion would be stronger if it could be shown that state anger, in addition to trait anger, is also associated with left rather than right prefrontal brain activity.

In a relevant study, Harmon-Jones and Sigelman (2001) investigated state anger and prefrontal brain activity. They told male college students that they would participate in two unrelated experiments that also involved an unseen "other male student" supposedly located in a different room. In the first experiment, the participants were asked to write essays. The essays were supposedly taken by the experimenter to the other room to be evaluated by the other male student. The experimenter then brought back from the other room an evaluation that was or was not extremely insulting. As soon as the participant read the evaluation, the experimenter started

recording EEG data as a measure of the participant's brain activity. Then the experimenter explained that the second experiment would involve taste perception. The participant would get to choose one of six possible beverages to have the other student taste, and the other student would have to drink the entire 33-ounce sample. The participant could choose from water that contained (in order from most pleasant to unpleasant) sugar, apple juice, lemon juice, salt, vinegar, and hot sauce to make the other student drink. Finally, as a manipulation check, participants reported their current levels of anger, fear and positive affect.

Participants who received an insulting evaluation of their essay reported significantly higher levels of anger and slightly lower fear and positive affect than participants who were not insulted. Participants who were insulted also had increased cortical activity in the left relative to the right prefrontal area but not in the parietal area. Finally, participants who were insulted chose less pleasant beverages to make the other student drink. In addition, the more left prefrontal cortical activity increased, the more likely insulted participants (but not non-insulted participants) were to make the other student drink a nasty beverage.

The results from Harmon-Jones & Sigelman's (2001) investigation of state anger and prefrontal brain activity are consistent with previous research distinguishing between offensive and defensive aggression (Blanchard &Blanchard, 1984). Offensive aggression involves approach in order to attack the source of frustration (fight), whereas defensive aggression involves withdrawal (flight). Blanchard & Blanchard (1984) have shown that offensive aggression is likely to be associated with anger. Additional areas of study suggest that anger can lead to offensive aggression. Research in prejudice, for example, suggests that the emotional state of anger leads to offensive behaviors for the purpose of removing obstacles or threats (Cottrell & Neuberg, 2005).

Emotions, Threats and Stereotypes

In a relevant study on prejudice, researchers Cottrell and Neuberg (2005) investigated the emotional reactions and threats elicited by specific social groups. Cottrell & Neuberg (2005) posited that specific social groups elicit specific emotions to specific threats and thus lead to specific motivations to carry out relevant behaviors. The social group African Americans, for example, may elicit the emotion fear in response to the threat of danger to physical safety, which in turn may lead to the specific motivation to protect self and valued others, resulting in the behavior of avoidance. Cottrell & Neuberg (2005) sampled White undergraduates from Arizona State University and asked them to complete an affective reactions measure and a measure of threat perceptions for a set of social groups that included Activist Feminists, African Americans, European Americans (as a baseline), Fundamentalist Christians, Gay Men, and Mexican Americans. To assess affective responses to each social group, participants were asked to report an overall positive evaluation, an overall negative evaluation and the extent to which they experienced each of 13 emotional reactions when thinking about each group and its members (1 = not at all, 9 = extremely). To assess perceived threats associated with each social group, participants reported a general index of threat (the extent to which each group was dangerous and posed a threat to American Citizens) and specific indices of threat derived from a sociofunctional approach and the works of emotion and attitude theorists. Examples of the specific threats measured for association with each social group included: obstacles and barriers to desired outcomes (which was associated with the action of punishing), and endangered group physical safety (which was associated with the action of active avoidance or escape).

The results of Cottrell and Neuberg's (2005) study supported their hypothesis that different social groups can evoke qualitatively different profiles of emotional reactions. As seen in the top first half of Table 1, for instance, the emotion response anger was found to be elicited

most strongly by Activist Feminists and Fundamental Christians. Cottrell and Neuberg (2005) also found support for an additional hypothesis that different social groups can evoke qualitatively different profiles of perceived threats. Fundamentalist Christians, for example, were found to evoke the perceived threat of obstacles to the in-group, including threats to one's freedoms and values. Finally, Cottrell and Neuberg (2005) found support for yet another hypothesis that profiles of the specific threats posed by different social groups would reliably and systematically predict the emotion profiles evoked by those same groups. African Americans, for example, were found to evoke the perceived threat of endangered safety (threats to property and safety), which reliably and systematically predicted the associated emotion of fear. Activist Feminists, in contrast, evoked the perceived threat of obstacles to in-group (threat to economic resources, personal freedoms, and rights of group members), which in turn reliably and systematically predicted the associated emotion of anger.

The Present Research

The goal of the present research was to demonstrate that fear and anger are related to different types of attitude-relevant behaviors. When people associate fear with a stigmatized social group their attitudes will predict their approach-avoidance behaviors better than their reward-punish behaviors. When people associate anger with a stigmatized social group, in contrast, their attitudes will predict their reward-punish behaviors better than their approach-avoid behaviors.

Experiment 1, therefore, primed the emotions fear or anger toward a group that previous researchers (Cottrell & Neuberg (2005) had identified as eliciting equal amounts of fear and anger in the average person – namely, Mexican Americans (see Table 1), and measured behaviors that involved both reward-punishment and approach-avoidance. Experiment 2 used as targets three groups that are known to differ in the extent to which they elicit the emotions fear

and anger in the average person. According to Cottrell and Neuberg's (2005) findings (see Table 1), African Americans elicit more fear than anger and Activist Feminists elicit more anger than fear. Experiment 2 also included a control group – Mexican Americans, that, based on a pretest, might elicit equal amounts of fear and anger.

In the pretest, 22 TCU undergraduates were asked to rate the extent to which they experienced each of 20 emotions when they thought about Activist Feminists, African Americans, Fundamentalists Christians, Gay Men and Mexican Americans. These ratings were made on a scale from 1 (not at all) to 9 (extremely). Table 1 shows the mean ratings from Cottrell and Neuberg's (2005) study at Arizona State and the pretest at TCU. Cottrell and Neuberg's (2005) results represent mean difference scores relative to ratings of European Americans. The TCU scores are simply raw means on the 1 - 9 rating scale. Because Cottrell & Neuberg's participants were all European Americans and the TCU participants were all European Americans, one would expect the ratios of anger to fear for each target group to be roughly the same in both samples. As Table 1 shows, that was true for Activist Feminists. For both Arizona State and TCU, Activist Feminists elicited far more anger than fear. It was also true for African Americans, who elicited more fear than anger at both Arizona State and TCU. Fundamentalists Christians elicited more anger than fear at both universities, but the standard deviations were high for both samples. For an unknown reason, Gay Men elicited more anger than fear at Arizona State but were low on both anger and fear at TCU. Finally, Mexican Americans elicited equal amounts of anger and fear at Arizona State and almost equal amounts of anger and fear at TCU. Based on these pretest ratings, Mexican Americans seemed like a reasonable target group for Experiment 1, in which the different emotions of anger and fear would be primed in regard to the same target group. Also, Activist Feminists and African

Americans seemed like reasonable target groups for Experiment 2, in which it was expected that different target groups would elicit either more anger than fear or more fear than anger

Table 1

Means and Standard Deviations of Emotional Reactions Based on Ratings of Emotional Reactions Toward Other Social Groups by Arizona State University Students (Cottrell & Neuberg, 2005) and Texas Christian University Students

	Arizona State University				Texas Christian University			
	Emotional Reaction				Emotional Reaction			
	Anger		Fear		Anger		Fear	
Group	M	SD	M	SD	M	SD	M	SD
Activist Feminists	.89	2.02	.24	1.50	3.06	1.87	1.85	.93
African Americans	.54	1.66	.90	1.63	1.76	1.16	2.18	1.53
Fundamentalist Christians	.94	2.12	.57	1.75	2.99	1.71	1.91	1.84
Gay Men	.62	2.06	.08	1.56	1.33	.51	1.32	.59
Mexican Americans	.87	1.99	.86	1.64	1.96	1.46	1.70	1.30

Note: Scale was 1= not at all to 9 = extremely. Cottrell & Neuberg (2005) calculated mean difference scores (M social group – Mean In-group (European Americans) and noted they could have used raw scores and achieved the same result. TCU pretest means were calculated using raw scores.

Possible Moderating Variables

The postulated effects of emotion function specificity on attitude-behavior consistency might be moderated by at least two individual difference factors: need for affect and affective intensity.

Need For Affect. Need for affect refers to an individual's motivation to approach or avoid situations and activities that could induce emotion. The Need For Affect Questionnaire (Maio & Esses, 2001) is based on two factors. One factor measures approach (e.g., "I approach situations in which I expect to experience strong emotions", "Emotions help people get along in life"), and the other measures avoidance ("Emotions are dangerous – they tend to get me into situations that I would rather avoid", "Acting on one's emotions is always a mistake"). Need for affect might moderate attitude-behavior consistency because the measure might include the tendency for people to believe that emotions are useful in making judgments and determining behavior (Maio & Esses, 2001).

Affective Intensity Measure. The Affective Intensity Measure (AIM) (Larsen, 1984; Larsen & Diener, 1987) was designed to measure the degree of intensity of affective experience with intensity defined as the strength of response. The AIM is composed of 40 questions that involve rating the strength of reactions to ordinary life events. The items reflect various situations involving affective reactions, such as reactions involving bodily responses and subjective experiences. Affective Intensity might moderate attitude-behavior consistency because the measure assesses the tendency for people to vary in the strength of their reactions to ordinary events that may play a role in making attitude judgments and determining behavior (Larsen, 1984; Larsen & Diener, 1987).

Experiment 1

The purpose of Experiment 1 was to prime either anger or fear to be associated with Mexican Americans and then to measure attitude-behavior consistency on two types of behaviors: reward-punish and approach-avoid behaviors.

Method

Participants

One-hundred fifty-five undergraduate students of European American descent participated for course credit. Four participants were excluded from analyses for not following directions. The final sample of 151 students was comprised of 37 men and 114 women. Gender did not have any significant effect on the results of this experiment and is therefore not mentioned from this point forward.

Procedure

First, participants were asked to report their attitudes toward several social groups including: Politicians, African Americans, Activist Feminists, Fundamentalist Christians, Newscasters, and Mexican Americans using a scale ranging from -5 (extremely negative) to 5 (extremely positive) (see Appendix A). Next, participants were randomly assigned to one of three priming conditions for the emotion manipulation: fear, anger or control. Based on pretest ratings, Mexican Americans seemed like a reasonable target group for Experiment 1, in which the different emotions of anger and fear were primed in regard to the same target group.

Participants randomly assigned to the fear condition were asked to write four separate explanations of why Mexican Americans make people feel the emotions fright, terrified, fear and worried (Appendix B). Those randomly assigned to the anger condition, in contrast, were asked to write four separate explanations of why Mexican Americans make people feel the emotions antagonism, rage, hostility and resentment (Appendix C). Those randomly assigned to the

control condition were asked to write four separate accounts of four classes that they have had, were taking at the time of the experiment, or planned to take in the future (Appendix D).

Directly following the manipulation, participants reported their willingness to engage in each of eight behaviors, four of which involved rewarding versus punishing, and the other four of which involved approaching versus avoiding, on scales ranging from 1 (not at all willing) to 7 (very much willing) (Appendix E). These eight behaviors are shown in Table 2 along with the percentage of TCU pretest students who thought that each one of them belonged in the reward-punish category and the percentage who thought that the behavior belonged in the approach-avoid category.

Table 2

Percent of TCU Pretest Students who Categorized Each of Eight Behaviors into the Two Behavior Types

	Behavior Type	
Behavior	Reward-Punish	Approach-Avoid
Giving a promotion.	100	0
Praising	95	5
Admitting to a selective graduate program.	91	9
Giving a gift.	91	9
Accepting as a neighbor.	0	100
Having as a casual acquaintance.	0	100
Accepting as a work colleague.	5	95
Accepting as one's boss.	14	86

Following the behavioral measures, participants completed a manipulation check measure in which they were asked how much they experience each of 16 emotions when they think about Mexican Americans (the target group), European Americans, African Americans and Activist Feminists (Appendix F). Eight of the emotions were chosen to represent the positive and negative sides of fear (nervous, alarmed, scared, anxious, calm, secure, serene and safe). Eight of the emotions were chosen to represent the positive and negative sides of anger (irritation, aggravation, frustration, anger, delight, pleasure, agreeable and grateful). None of these 16 emotion words were used in the priming manipulation. Next, participants were asked to what extent four types of threats represented their beliefs about Mexican Americans (the target group), African Americans and Activist Feminists (Appendix G). Two of the items represented beliefs that the group in question poses a threat to physical safety (fear), and the remaining two items represented beliefs that the group in question (e.g., Mexican Americans) poses a threat to the success of Americans (anger). Then participants were asked to classify behaviors on the degree to which they implied a way of approaching someone or rewarding someone (Appendix H). Next, participants completed the Need for Affect Scale (Maio & Esses, 2001) (Appendix I), the Affect Intensity Measure (AIM) (Larsen, 1984; Larsen & Diener, 1987) (Appendix J) and a measure of Social Desirability (Marlowe-Crowne, 1960) (Appendix K). Finally, participants were debriefed and thanked for their participation.

Results

Manipulation Check: Emotions by Priming Condition

The emotion ratings that participants made following the behavioral measures were used to create two sets of scores, one for associated fear and one for associated anger when thinking about Mexican Americans (see Table 3). The top half of Table 3 shows the first set of emotion

scores that were calculated to measure the negative and positive aspects of associated fear. A score measuring the negative aspect of associated fear (fear) was calculated by averaging participants' ratings of the degree to which they associate the emotions alarmed, anxious, nervous and scared with the target group Mexican Americans. A score measuring the approximate opposite of fear (safety) was calculated by averaging participants' ratings on the degree to which they associate the emotions calm, secure, serene and safe with the target group Mexican Americans. The bottom half of Table 3 shows the second set of emotion scores that were calculated to measure the negative and positive aspects of associated anger with the target group Mexican Americans. A score measuring the negative aspect of associated anger (anger) was calculated by averaging participants' ratings of the degree to which they associate the emotions aggravation, anger, frustration and irritation with the target group Mexican Americans. A score measuring the approximate opposite of anger (pleasure) was calculated by averaging participants' ratings on the degree to which they associate the emotions agreeable, delight, grateful and pleasure with the target group, Mexican Americans.

Emotion scores were calculated to perform a manipulation check for primed emotion for the three conditions, Fear, Anger and Control. The predicted pattern of means would create a significant Associated Emotion x Condition interaction, with pairwise comparisons showing that participants primed with fear would associate more fear than anger with the target group, Mexican Americans, whereas participants primed with anger would associate more anger than fear with the target group, Mexican Americans.

A 3 (Priming Condition: Fear, Anger, Control) x 4 (Emotion Type: Fear, Safety, Anger, Pleasure) mixed model Analysis of Variance (ANOVA) was conducted to evaluate the effect of priming different emotions on the emotions that participants reported. Emotion Type was the within-subjects factor and priming condition was the between-subjects factor. The means from

this ANOVA are shown in Table 3 in bold font. As Table 3 shows, the ANOVA yielded a significant main effect for Emotion Type, F (3, 444) = 2.87, $p < .05$). More importantly, the main effect for Emotion Type was qualified by a significant two-way Priming Condition x Emotion Type interaction, F (6, 432) = 3.12, $p < .01$. Priming condition had a significant effect on fear, [simple effects: F (2, 444) = 4.73, $p < .01$. By Tukey's HSD test, participants primed with fear associated more fear (M = 4.99, SD = 1.99) with Mexican Americans than did participants in the other two conditions (anger, M = 3.98, SD = 1.78; control, M = 4.01, SD = 1.61), who did not differ. Priming condition did not affect the amount of safety associated with Mexican Americans, F (2, 444) = .96, *ns*. Priming condition had a marginally significant effect on anger, F (2, 444) = 2.71, $p < .07$, although not in the intended direction. Participants primed with fear (M = 5.43, SD = 2.10) reported greater anger than participants in the other two conditions (anger, M = 4.59, SD = 1.86; control, M = 4.79, SD = 1.89). Finally, priming condition did not affect the pleasure that participants associate with Mexican Americans, F (2, 444) = 1.21, *ns*.

Table 3

Mean Emotions Associated with the Attitude Target Mexican Americans by Participants in the Anger, Fear and Control Conditions (Experiment 1)

	Fear (N = 49)		Anger (N = 47)		Control (N=55)	
	M	SD	M	SD	M	SD
Fear	**4.99**	**1.99**	**3.98**	**1.78**	**4.01**	**1.61**
alarmed	5.26	2.24	3.79	1.86	4.24	2.17
anxious	4.45	2.16	3.23	1.88	3.59	1.76
nervous	5.00	2.46	4.08	2.19	4.11	2.06
scared	5.37	2.33	4.65	2.28	4.18	1.96
Safety	**4.24**	**1.93**	**4.59**	**1.66**	**4.74**	**1.58**
calm	4.85	2.12	5.39	1.98	5.64	1.66
safe	3.90	2.08	4.51	2.08	4.82	2.31
secure	4.09	2.12	4.50	2.23	4.54	1.95
serene	4.00	2.23	4.00	1.98	4.14	1.66
Anger	**5.43**	**2.10**	**4.59**	**1.86**	**4.79**	**1.89**
aggravation	5.34	2.05	4.32	1.80	4.75	2.17
anger	4.97	2.43	3.73	2.22	4.11	2.04
frustration	5.81	2.51	5.20	2.18	5.21	2.17
irritation	5.63	2.39	4.92	2.01	5.09	2.18
Pleasure	**4.20**	**1.38**	**4.65**	**1.76**	**4.74**	**1.71**
agreeable	4.96	1.68	5.57	1.83	5.38	1.90
delight	4.16	1.90	4.83	2.14	4.75	2.01
grateful	4.45	2.08	4.29	2.35	4.69	2.28
pleasure	3.07	1.82	3.92	2.40	4.02	2.27

Manipulation Check: Threat by Condition

Table 4 shows mean threats associated with Mexican Americans. A Priming Condition x Threat interaction was expected. Such an interaction would show differences in associated

threats toward the target group, Mexican Americans. Participants asked to write about associated fear toward Mexican Americans were expected to show a greater association for beliefs reflecting fear (threat to physical safety, threat of physical harm) than beliefs reflecting anger (threat to economic resources, threat to rights and freedoms). Participants asked to write about associated anger toward Mexican Americans were expected to show a greater association for beliefs reflecting anger than fear. Finally, participants in the control condition were expected to associate beliefs reflecting equal amounts of fear and anger.

A 3 (Priming Condition: Fear, Anger, Control) x 2 (Threat Type: Safety, Freedom) mixed model ANOVA was performed with Priming Condition being the between-subjects factor and Threat Type the within-subjects measure. This ANOVA yielded a significant main effect for Threat Type, F (1, 148) = 12.47, $p < .001$. Participants across conditions reported associating more threats to freedom (M = 5.47, SD = 2.31) than safety (M = 4.95, SD = 2.09) with Mexican Americans. This main effect of Threat Type was not qualified by an interaction with priming condition, F (2, 148) = 1.64, *ns*.

Table 4

Mean threats associated with the attitude target Mexican Americans by participants Primed to Associate Emotions with Mexican Americans (Fear or Anger) and No Primed to Associate Emotions with Mexican Americans (Control) (Experiment 1)

	Fear (N = 49)		Anger (N = 47)		Control (N = 55)		Total (N = 151)	
Threat	M	SD	M	SD	M	SD	M	SD
Personal Safety	5.60	2.06	5.40	2.12	4.62	2.14	5.18	2.14
Physical Harm	5.06	2.14	5.02	2.27	4.16	2.09	4.72	2.19
Threat to Safety	**5.33**	**1.99**	**5.21**	**2.13**	**4.39**	**2.05**	**4.95**	**2.09**
Economic Resources	6.11	2.36	5.94	2.51	5.84	2.38	5.96	2.41
Rights and Freedoms	5.14	2.71	5.19	2.60	4.65	2.46	4.98	2.58
Threat to Freedom	**5.63**	**2.35**	**5.56**	**2.31**	**5.25**	**2.29**	**5.47**	**2.31**

A factor analysis was conducted to determine if the specific threats statistically measured two sets of threat, one reflecting associated fear and the other reflecting associated anger toward the target group, Mexican Americans. The factor analysis revealed that all four specific types of threat loaded on one factor instead of the hypothesized two-factor solution. All four specific threats (Personal Safety, Physical Harm, Economic Resources, Rights and Freedoms) loaded on one factor accounting for 75.3% of the variance. Furthermore, an inter-item analyses for the four threat items revealed high inter-item reliability, Cronbach's $\alpha = .886$. Based on the results of this one-factor solution, subsequent analyses will address threat as one entity instead of being composed of two parts.

Manipulation Check: Attitudes by Condition

A one-way ANOVA was performed on attitudes toward Mexican Americans with Priming Condition being the between-subjects factor. Table 5 shows the means from this ANOVA which did not yield a significant main effect for Priming Condition, F (2, 148) = .139, *ns*. Participants were not significantly different in their attitudes toward Mexican Americans prior to the emotion manipulation.

Table 5

Mean Attitudes Toward Mexican Americans by Participants in Fear, Anger and Control Conditions Prior to the Emotion Manipulation (Experiment 1)

Fear		Anger		Control	
M	SD	M	SD	M	SD
0.96	2.35	1.01	2.19	1.18	2.32

Manipulation Check: Behaviors

As a manipulation check, participants rated the eight behavioral items on the degree to which each item was a way of approaching or rewarding someone. It was hypothesized that two factors would emerge from the analysis, one representing reward behaviors, and one representing approach behaviors. As shown in Table 6, the eight behavior judgments were subjected to a factor analysis with Verimax rotation to determine if they statistically measured what they were conceptually intended to measure. The final rotated factor solution of the eight items revealed three factors that accounted for 71.69% of the variance (see Table 7). As the first column in Table 6 shows, the behaviors giving a promotion, praising, admitting to selective graduate program and giving a gift all loaded on one factor accounting for 37.17% of the variance. It was hypothesized that the four approach behaviors would load on one factor as well. As the second

and third columns in Table 6 show, the approach behaviors loaded on two separate factors. As seen in the second column of Table 6, the first of these two approach factors, approach-work, consists of the approach behaviors accepting as a work colleague and accepting as one's boss and accounted for 21.43% of the variance. The second of the two approach behavior factors, approach-home, consists of the approach behaviors having as a casual acquaintance and accepting as a neighbor and accounted for the remaining 13.09% of the variance.

Table 6

Factor Loadings from Principle Components Analysis of Reward and Approach Behaviors Resulting in the Three Factors: Reward, Approach-Work and Approach-Home (Experiment 1)

	Factor Loading		
	Reward	Approach - Work	Approach - Home
Behavior	1	2	3
giving a promotion	**0.863**	0.179	-0.083
praising	**0.846**	-0.007	0.182
admitting to selective grad program	**0.705**	0.197	-0.002
giving a gift	**0.704**	-0.042	0.213
accepting as a work colleague	-0.002	**0.842**	0.222
accepting as one's boss	0.231	**0.842**	-0.051
having as a casual acquaintance	0.165	0.014	**0.891**
accepting as a neighbor	0.023	0.557	**0.684**

Note: Extraction Method: Principle Component Analysis. Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 5 iterations. Bold values indicate the highest eigenvalue.

Table 7

Eigenvalues, Percentage of Variance, and Cumulative Percentages for Factors of the Eight Behavior Items (Experiment 1)

Factor	Eigenvalue	% of Variance	Cumulative %
Reward	2.974	37.171	37.171
Approach - Work	1.715	21.433	58.604
Approach - Home	1.047	13.087	71.690

Behaviors Aroused by Groups

According to the central hypothesis of the present study, different emotions--namely fear and anger--would be associated with different types of behavior--namely behaviors involving ways of approaching or rewarding someone. To test this facet of the central hypothesis, an analysis was performed on participants' willingness to engage in four approach behaviors and four reward behaviors, to evaluate whether or not priming the emotions fear and anger had an effect on willingness to reward or approach a member of the target group, Mexican Americans.

A 3 (Priming Condition: Fear, Anger, Control) x 2 (Behavior Type: Reward, Approach) mixed model ANOVA was performed with Priming Condition being the between-subjects factor. Table 8 shows the means from this ANOVA, which yielded a significant main effect for behavior type, F (1, 148) = 9.42, $p < .01$. The top half of Table 8 shows the means for willingness to engage in reward behaviors. The bottom half of Table 8 shows the means for willingness to engage in approach behaviors. Participants were more willing to engage in reward –punish behaviors (M = 5.18, SD = 1.21), than approach-avoid behaviors (M = 4.97, SD = 1.30). The main effect for Behavior Type (Reward, Approach) was not qualified by a Priming Condition x Behavior Type Interaction, F (2, 148) = .405, *ns*. Based on the prior factor analysis

of the behavioral measures, a 3 (Priming Condition: Fear, Anger, Control) x 3 (Behavior Type: Reward, Approach-Work, Approach-Home) mixed model ANOVA was performed where Priming Condition was the between-subjects factor and Behavior Type was the within-subjects measure. This ANOVA also yielded a significant effect for Behavior Type, F (2, 296) = 14.57, p < .001, and was also not qualified by a significant Priming Condition x Behavior Type interaction, F (4, 296) = .513, *ns*.

Table 8

Mean Willingness to Perform Approach or Reward Behaviors Toward Mexican Americans by Condition of Emotion Manipulation, Fear, Anger or Control (Experiment 1)

	Fear (N = 49)		Anger (N = 47		Control (N = 55)		Total (N = 151)	
Behaviors	M	SD	M	SD	M	SD	M	SD
Reward								
Giving a promotion	4.80	1.55	5.14	1.42	4.80	1.62	4.91	1.53
Praising	5.02	1.76	5.32	1.39	5.05	1.46	5.13	1.54
Admitting to grad program	4.79	1.53	5.35	1.56	5.31	1.43	5.16	1.52
Giving a gift	4.99	1.65	5.13	1.54	5.17	1.54	5.10	1.57
Total Reward	5.02	1.26	5.36	1.22	5.16	1.17	5.18	1.21
Approach								
Approach -Work								
Accept as one's boss	4.39	1.66	4.74	1.41	4.33	1.77	4.48	1.63
Accept as work colleague	5.08	1.47	5.28	1.40	5.06	1.38	5.14	1.41
Total Approach-Work	4.74	1.46	5.01	1.31	4.70	1.45	4.81	1.41
Approach - Home								
Accept as a neighbor	4.73	1.63	4.98	1.48	4.59	1.57	4.76	1.56
Accept as acquaintance	5.40	1.51	5.50	1.26	5.66	1.36	5.52	1.37
Total Approach - Home	5.07	1.46	5.24	1.30	5.13	1.29	5.14	1.34
Total Approach	4.90	1.37	5.12	1.23	4.90	1.30	4.97	1.30

Attitude-Behavior Consistency

Table 9 shows attitude-behavior correlations by condition for the three conditions. All of the correlations were significant. The highest correlations were in the Anger condition.

Table 9

Attitude-Behavior Correlations by Condition for the Three Types of Behaviors Toward Mexican Americans: Reward, Approach-Work and Approach-Home (Experiment 1)

	Condition		
	Fear	Anger	Control
Behavior Type	(N = 49)	(N = 47)	(N = 55)
Reward	0.379**	0.586**	0.348**
Approach	0.366**	0.453**	0.474**
Approach - Work	0.322*	0.353*	0.469**
Approach - Home	0.364**	0.506**	0.433**

Note: ** $p < .01$, * $p < .05$

To further analyze attitude-behavior consistency, participants' endorsements of the four approach-avoid behaviors and the four reward-punish behaviors were averaged to form one index of approach-avoid behavior and one index of reward-punish behavior. Next, the behavior indices were standardized as *z*-scores. In addition, attitudes toward the target group Mexican Americans reported at the beginning of the experiment were also standardized into *z*-scores. Two attitude-behavior incongruency scores for each participant were then calculated, one for each type of behavior (approach-avoid and reward-punish). The approach-avoid attitude-behavior incongruency score was calculated by taking the absolute difference between each participants' standardized attitude toward Mexican Americans and his or her standardized

approach-avoid behavioral index score. The reward-punish attitude-behavior incongruency score was calculated by taking the absolute difference between each participants' standardized attitude toward Mexican Americans and his or her standardized reward-punish behavioral index score. The two attitude-behavior incongruency scores (attitudinal-behavioral measures) were calculated to use as a measure of attitude-behavior consistency, where smaller incongruency scores reflect greater attitude-behavior consistency. The incongruency scores were then subjected to analysis with Priming Condition as a between-subjects factor.

A 2 (Behavior Measure: Approach-Avoid, Reward-Punish) x 3 (Priming Condition: Fear, Anger, Control) mixed model ANOVA was performed on attitudinal incongruency scores, in which Priming Condition was the between-subjects factor. Table 10 shows the means for this ANOVA which did not yield a main effect for Behavioral Measure (Approach-Avoid, Reward-Punish), F (1, 148) = .399, *ns,* but did result in a significant Behavior Measure x Priming Condition interaction, F (2, 148) = 3.07, $p < .05$. As the first row in Table 10 shows, participants differed in attitude-behavior consistency on the reward-punish measure depending on Priming Condition, simple effect: F (2, 148) = 5.60, $p < .01$. Participants asked to associate anger with their attitudes toward Mexican Americans were significantly lower in reward-punish attitude-behavior incongruency (M = .64, SD = .62) compared to participants asked to associate fear (M = .83, SD = .73) or those serving as controls (M = .89, SD = .70). As the second row of Table 10 shows, participants did not show differences in attitude-behavior congruency by condition for approach behaviors, simple effect, F (2, 148) = 1.20, *ns*.

Additional analyses using the individual difference measures Need for Affect (Maio & Esses, 2001), the Affect Intensity Measure (Larsen,1984; Larsen & Diener, 1987) and a Social Desirability Scale (Marlowe & Crowne, 1960) were run to test whether or not individual differences had any significant effects on attitude-behavior incongruency scores. Each individual

difference measure was split into two categories, high and low, based on median splits. Thus, participants were categorized as being high or low on Need For Affect, Affect Intensity and Social Desirability. These individual difference scores were then used as third factors in three additional mixed model ANOVAs, in which Priming Condition (Fear, Anger , Control) and Behavior Measure: Approach-Avoid, Reward-Control) were the other factors. The three-way interactions involving each individual difference measure were not significant. None of the individual difference measures qualified the significant Priming Condition x Behavior Measure interaction, three-way *F*s = *F* (2,145) = .230, *ns* for Need for Affect, *F* (2,145) = .839, *ns* and *F* (2,145) = 1.07, *ns*.

Table 10

Attitude-Behavior Incongruencies for Behavior Type by Condition (Experiment 1)

	Fear (N = 49)		Anger (N = 47		Control (N = 55)		Total (N = 151)	
Behavior Type	M	SD	M	SD	M	SD	M	SD
Reward-Punish	0.83[a]	0.73	0.64[b]	0.62	0.89[a]	0.70	0.79	0.69
Approach-Avoid	0.88[c]	0.70	0.79[c]	0.65	0.78[c]	0.66	0.82	0.67

Note: Row means with differing superscripts are significantly different, $p < .05$ by Tukey's *HSD*.

Summary

The results are summarized in Table 11, which shows both the predicted and the observed results for the major measures.

Associated Emotions. The first line of the table shows that the fear manipulation was moderately successful. Participants in the fear condition were expected to report feeling greater amounts of fear when thinking about Mexican Americans after writing about situations involving

Mexican Americans that could elicit fear, and they did. The second line of the table shows that the anger manipulation was not successful. Participants in the anger condition, who were expected to report greater amounts of anger toward Mexican Americans following the manipulation, actually reported lower amounts of anger than participants in the fear condition. Participants in the fear condition reported greater amounts of both fear and anger associated with the target group Mexican Americans.

Associated Threats. The next two rows of Table 11 show that, based on Cottrell and Neuberg (2005), participants were expected to differ by condition on the type of threat associated with the target group Mexican Americans. Participants in the fear condition were expected to associate more threat to safety and physical harm and lower amounts of threat to personal freedoms and economic resources with the attitude target Mexican Americans than participants in the anger condition, but they did not. As the table shows, however, the prediction was partially supported. Participants in the fear condition associated relatively high amounts of threat to safety and physical harm with the attitude target Mexican Americans. Unexpectedly, participants in the anger condition did as well. The fourth row of Table 11 shows that participants were also expected to differ in the amount of threat to economic resources and rights and freedoms associated with the attitude target Mexican Americans. This prediction was also partially supported. Participants in the fear condition were expected to associate low amounts of threat to rights and freedoms with the target group Mexican Americans, but they did not. As the table shows, participants in the fear condition associated relatively high amounts of threat to freedoms with the target group Mexican Americans. Participants in the anger condition were expected to associate high amounts of threat to rights and freedoms with Mexican Americans, and they did. Participants asked to associate anger with the target group Mexican Americans

associated high amounts of threat to rights and freedoms with the target group Mexican Americans.

Attitude-Behavior Consistency. Finally, the fifth and sixth rows of Table 11 show that attitude-behavior consistency was expected to be greater for participants in the fear condition for behaviors that involve avoiding (not approaching) the target rather than approaching to punish (not rewarding) the target. It was also predicted that attitude-behavior consistency would be lower for participants in the anger condition for behaviors involving avoiding (not approaching) the target rather than approaching to punish (not rewarding) the target. As the fifth row of the table shows, these predictions were not supported. Participants asked to associate fear with the target Mexican Americans were low in attitude –behavior consistency for avoidance (not approach) behaviors. Participants in the anger condition who were asked to associate anger with the target group Mexican Americans displayed low to medium amounts of attitude-behavior consistency for the avoidance (not approaching) behaviors.

The sixth row of Table 11 shows that attitude-behavior consistency was expected to be greater for participants in the anger condition when the behavioral opportunities involved approaching to punish (not reward) the target. This prediction was supported. Participants who were asked to associate anger with the target group Mexican Americans showed greater attitude-behavior consistency for behaviors that involved approaching to punish (not reward) a member of the target group Mexican Americans. In addition, the sixth row of the table shows that attitude-behavior consistency was expected to be lower for participants in the fear condition when the behavioral opportunities involved approaching to punish (not rewarding) the target. This prediction was also supported. Participants who were asked to associate fear with the target group Mexican Americans displayed lower attitude-behavior consistency for behaviors that involved approaching to punish (not reward) a member of the target group Mexican Americans.

Table 11.

Summary of Predicted and Observed Results for Experiment 1

	Predicted		Observed	
	Condition		Condition	
	Fear	Anger	Fear	Anger
Emotions				
Fear	Hi	Lo	Hi	Lo
Anger	Lo	Hi	Hi	Lo
Threats				
Safety/Harm Threat	Hi	Lo	Hi	Hi
Resources/Rights Threat	Lo	Hi	Hi	Hi
Attitude-Behavior Consistency				
ABC Approach-Avoid	Hi	Lo	Lo	Lo
ABC Reward-Punish	Lo	Hi	Lo	Hi

Note: Summary is taken from results found in associated tables. "Hi" and "Lo" represent relative numbers based on scale points for each finding. See associated Tables 3-10 for corresponding values.

Experiment 2

The purpose of Experiment 2 was to test whether attitudes toward groups known to elicit different degrees of fear and anger would better predict approach-avoid behaviors or reward-punish behaviors. Attitudes and behaviors were measured for three social groups. One of the groups (African Americans) is known to elicit more fear than anger. A second one of the groups

(Activist Feminists) is known to elicit more anger than fear. The third or "control" group (Mexican Americans) is known to elicit equal amounts of fear and anger. The hypothesis was that attitudes toward African Americans would predict approach-avoid behaviors better than reward-punish behaviors, that attitudes toward Activist Feminists would predict reward-punish behaviors better than approach-avoid behaviors, and that attitudes toward Mexican Americans would predict both types of behaviors equally well.

Method

Participants

One hundred fifty-eight undergraduate students of European American descent (42 men and 116 women) participated for course credit. Gender had no significant effects.

Procedure

First, participants reported their attitudes toward several social groups including: Fraternity Brothers, Former Substance Abusers, Politicians, African Americans, Activist Feminists, Fundamental Christians, Gay Men and Mexican Americans, using scales ranging from -5 (very negative) to 5 (very positive) (see Appendix A). Next, in a second separate booklet of materials, participants were randomly assigned to one of two types of behavioral measures: approach-avoid or reward-punish. Those randomly assigned to the approach-avoid condition were asked to report their willingness to engage in four approach-avoid behaviors (accepting as a neighbor, accepting as a work colleague, accepting as one's boss and having as a causal acquaintance), using scales ranging from 1 (not at all willing) to 7 (extremely willing) (see Table 2). Participants randomly assigned to the reward-punish condition were asked to report their willingness to engage in reward-punish behaviors (admitting to a selective graduate program, giving a gift, giving a promotion, and praising), using scales ranging from 1 (not at all willing) to 7 (extremely willing) (see Table 2). All participants reported their willingness to

engage in one or the other set of behaviors for several groups including three target groups African Americans, Activist Feminists, and Mexican Americans (Appendix L).

In a third, separate booklet of materials, participants completed three manipulation checks. For a first manipulation check, participants were asked how much they experience each of 16 emotions when they think about African Americans (fear), Activist Feminists (anger) and Mexican Americans (neutral: equal amounts of fear and anger) (Appendix M). This manipulation check measure was similar to that used in Experiment 1 (see Appendix G), where eight of the emotions were chosen to represent the negative and positive sides of fear (nervous, alarmed, scared, anxious, calm, secure, serene and safe) and eight of the emotions were chosen to represent the negative and positive sides of anger (irritation, aggravation, frustration, anger, delight, pleasure, agreeable and grateful). Based on the results of Cottrell & Neuberg (2005) and the TCU pretest, that African Americans tend to elicit more fear, it was anticipated that Activist Feminists would elicit more anger and Mexican Americans would elicit equal amounts of fear and anger.

For a second manipulation check, participants were asked to what extent four statements of threats represented their beliefs about Mexican Americans (the target group), African Americans and Activist Feminists (Appendix G). This manipulation check was also used in Experiment 1, where two of the items represent beliefs that the group in question poses a threat to physical safety and physical harm (fear) and the remaining two items represent beliefs that the group in question (e.g., Mexican Americans) poses a threat to the success of Americans (anger).

For a third manipulation check, all participants were asked the extent to which they perceive each of their four behavioral questions as reflecting a tendency to reward versus punish someone or approach versus avoid someone and the additional four behavioral questions as

reflecting a tendency to reward versus punish someone or approach versus avoid someone (Appendix H).

Finally, in a fourth separate booklet, participants were asked to complete a Need for Affect scale (Maio and Esses, 2001) (Appendix I), and the Affect Intensity Measure (Larsen,1984; Larsen & Diener, 1987) (Appendix J).

Results

Manipulation Checks

The emotion ratings that participants made following the behavioral measures were used to create two sets of scores, one for associated fear and one for associated anger when thinking about African Americans, Activist Feminists, and Mexican Americans (See Table 12). As shown in the top half of Table 12, the fear score was derived by taking the mean of the ratings for emotions representing the negative side of fear (nervous, alarmed, scared and anxious) and the safety score was calculated to represent the inverse of fear and was derived by taking the mean of the ratings for emotions representing the positive side of fear (calm, secure, serene and safe). The second set of emotion scores representing the negative (anger) and positive (pleasure) sides of anger can be found in the bottom half of Table 12. As seen in the bottom half of Table 12, the anger score was derived by taking the mean ratings representing the negative side of anger (irritation, aggravation, frustration and anger) and the pleasure score, calculated to represent the inverse of anger, was derived by taking the mean ratings representing the positive side of anger (delight, pleasure, agreeable and grateful).

Manipulation Check: Emotions by Target Group

The present experiment was expected to find a significant Attitude Target x Associated Emotion interaction, with pairwise comparisons showing that African Americans would be associated with feeling more fear than anger, Mexican Americans would be associated with

equal amounts of anger and fear, and Activist Feminists would be associated with more anger than fear.

A 3 (Target: African Americans, Mexican Americans, Activist Feminists) x 4 (Associated Emotion: Fear, Safety, Anger, Pleasure) within-subjects analysis of variance (ANOVA) was conducted to evaluate the effect of specific attitude targets eliciting specific types of emotion. The means from this ANOVA are shown in Table 12 in bold font. As Table 12 shows, the ANOVA yielded a significant main effect for Target, F (2, 936) = 7.96, $p < .001$. In addition, the ANOVA also yielded a significant main effect for Emotion, F (3, 936) = 28.20, $p < .001$. More importantly, the main effects of Target and Emotion were qualified by a significant two-way Target x Emotion interaction, F (6, 936) = 30.30, $p < .001$. Participants reported differences in the amount of fear they felt when thinking about the three targets, African Americans, Activist Feminists and Mexican Americans, simple effect, F (2, 936) = 16.43, $p < .001$. As the first bold row of Table 12 shows, participants reported feeling more fear associated with African Americans (M = 3.48, SD = .166), and Mexican Americans (M = 3.22, SD = 1.69) than with Activist Feminists (M = 2.59, SD = 1.39), Tukey's HSD, $p < .05$. Participants did not, however, show differences in the amount of safety (the approximate opposite of fear) they felt when thinking about the three targets, simple effect, F (2, 936) = 1.00, *ns*.

Participants reported differences in the anger they felt when thinking about the three targets, African Americans, Activist Feminists and Mexican Americans simple effect, F (2, 936) = 36.38, $p < .001$. As the third bold row of text in Table 12 shows, participants associated more anger with Activist Feminists (M = 4.55, SD = 2.22), than with the other target groups, African Americans (M = 3.24, SD = 1.77) and Mexican Americans (M = 3.54, SD = 1.77), Tukey's HSD, $p < .01$. Participants also differed in the amounts of pleasure (approximate opposite of anger) they associated with, African Americans, Activist Feminist and Mexican Americans [simple

effect, F (2, 936) = 40.69, $p < .001$]. As the fourth bold row of text in Table 12 shows, participants associated less pleasure with the target group Activist Feminists (M = 3.42, SD = 1.91) than with African Americans (M = 4.78, SD = 1.89) and Mexican Americans (M = 4.53, SD = 1.71).

Table 12

Mean Emotions for the Attitude Targets African Americans, Activist Feminists, and Mexican Americans (Experiment 2)

	African Americans		Activist Feminists		Mexican Americans	
	M	SD	M	SD	M	SD
Fear	**3.48**[a]	**1.66**	**2.59**[b]	**1.39**	**3.22**[a]	**1.69**
alarmed	3.17	1.85	3.24	2.11	3.32	2.04
anxious	3.22	1.76	2.83	2.04	2.96	1.94
nervous	3.76	2.07	2.12	1.50	3.29	2.04
scared	3.73	2.07	2.05	1.55	3.28	2.01
Safety	**4.46**[c]	**1.86**	**4.53**[c]	**1.89**	**4.31**[c]	**1.76**
calm	5.18	2.17	4.42	2.35	5.39	2.14
safe	4.45	2.20	5.33	2.55	4.13	2.06
secure	4.29	2.17	4.91	2.47	4.09	2.05
serene	3.87	2.13	3.56	2.18	3.63	2.17
Anger	**3.24**[d]	**1.77**	**4.55**[e]	**2.22**	**3.54**[d]	**1.77**
aggravation	3.24	1.92	5.04	2.45	3.85	1.88
anger	2.56	1.79	3.67	2.34	2.78	1.94
frustration	3.50	2.13	4.62	2.52	3.83	2.17
irritation	3.66	2.06	4.83	2.48	3.82	2.15
Pleasure	**4.78**[f]	**1.89**	**3.42**[g]	**1.91**	**4.53**[f]	**1.71**
agreeable	5.64	2.15	3.65	2.24	5.58	1.82
delight	4.85	2.17	3.29	2.06	4.40	2.12
grateful	4.46	2.29	3.82	2.45	4.62	2.31
pleasure	4.03	2.43	2.98	2.11	3.43	2.13

Manipulation Check: Threats by Target Group

A significant Attitude Target x Associated Threats interaction, with pairwise comparisons was expected, showing that African Americans are associated with stronger beliefs reflecting

fear (threat to personal safety, threat of physical harm), Mexican Americans were expected to be associated with beliefs reflecting equal amounts of anger (threats to economic resources and rights and freedoms) and fear, and Activist Feminists to be associated with beliefs reflecting more anger than fear.

A 3 (Target: African Americans, Activist Feminists, Mexican Americans) x 4 (Associated Threat: Personal Safety, Physical Harm, Economic Resources, Rights and Freedoms) within-subjects ANOVA was conducted to evaluate the effect of specific attitude targets eliciting specific types of threats. The first set of threats thought to elicit fear consisted of the threat to personal safety and the threat of physical harm. The second set of beliefs thought to elicit anger consisted of the threat to economic resources and threat to rights and freedoms. Table 13 shows the means for this ANOVA that failed to yield a significant main effect for threat F (3, 936) = 1.50, *ns*. The ANOVA, however, did yield a significant main effect for target, F (2, 936) = 44.10, $p < .001$. More importantly, the main effect for target was qualified by a significant Target x Threat interaction, F (6, 936) = 42.18, $p < .001$. As the first row of Table 13 shows, participants reported differences in the degree to which they experienced threat to personal safety when thinking about the three target groups African Americans, Activist Feminists and Mexican Americans simple effect: F (2, 936) = 96.79, $p < .001$. Participants associated stronger threat to personal safety with African Americans (M = 4.01, SD = 1.96) and Mexican Americans (M = 4.12, SD = 1.83) than with Activist Feminists (M = 2.54, SD = 1.55) by Tukey's *HSD*, $p < .05$. As the second row of Table 13 shows, participants reported differences in the degree to which they associate threat of physical harm with African Americans, Activist Feminists and Mexican Americans simple effect: F (2, 936) = 112.77, $p < .001$. Participants associated significantly stronger threat to physical harm with African Americans (M = 4.20, SD = 2.03) and Mexican Americans (M = 3.92, SD = 1.90) than with

Activist Feminists ($M = 2.42$, $SD = 1.62$), Tukey's *HSD,* $p < .05$. For the threats associated with fear, participants most strongly endorsed the threats when the threats were associated with the target groups African Americans and Mexican Americans compared to when the threats were associated with Activist Feminists.

The second set of threats reflects beliefs that are thought to be associated with the emotion anger. These beliefs are threat to economic resources and threat to rights and freedoms. The means for the first of these threats, threat to economic resources, are found in the third row of Table 13. As shown in Table 13, participants reported differences in the degree to which they associate threat to economic resources with the three targets, African Americans, Activist Feminists and Mexican Americans [simple effect: F (2, 936) = 105.31, $p < .001$]. Participants associated the most threat to economic resources with Mexican Americans ($M = 4.75$, $SD = 2.19$), followed by African Americans ($M = 3.35$, $SD = 1.96$) and Activist Feminists ($M = 3.01$, $SD = 1.94$), Tukey's *HSD*, $p < .05$. The means for the second threat associated with the emotion anger, threat to rights and freedoms, are shown in the fourth row of Table 13. Participants reported differences in the degree to which they associated threat to rights and freedoms with the three targets, African Americans, Activist Feminists and Mexican Americans simple effect: F (2, 936) = 28.32, $p < .001$. According to post hoc testing, participants associated the most threat to rights and freedoms with Mexican Americans ($M = 4.04$, $SD = 2.29$), followed by Activist Feminists ($M = 3.60$, $SD = 2.22$) and then African Americans ($M = 3.09$, $SD = 2.07$), Tukey *HSD*, $p < .05$.

Table 13

Mean Threats for the Attitude Targets African Americans, Activist Feminists, and Mexican Americans (Experiment 2)

	African Americans		Activist Feminists		Mexican Americans	
Threat	M	SD	M	SD	M	SD
Fear						
Personal Safety	4.01[a]	1.96	2.54[b]	1.55	4.12[a]	1.83
Physical Harm	4.20[c]	2.03	2.42[d]	1.62	3.92[c]	1.90
Anger						
Economic Resources	3.35[e]	1.96	3.01[f]	1.94	4.75[g]	2.19
Rights and Freedoms	3.09[h]	2.07	3.60[i]	2.22	4.04[h]	2.29

Note: Row means with differing superscripts are significantly different, $p < .05$ by Tukey's *HSD*.

Attitudes by Target Group

A 3 (Target: African Americans, Activist Feminists, Mexican Americans) x 2 (Behavior Type: Approach, Reward) mixed model analysis of variance (ANOVA) was performed on attitude scores in which Target was a within-subjects factor and Behavior Type was the between-subjects factor. As Table 14 shows, the ANOVA produced a significant main effect for target, $F(2, 312) = 31.51$, $p < .001$. The ANOVA did not reveal a target x condition interaction, $F(2, 312) = 0.73$, *ns.* As shown in the last row of Table 14, attitudes toward African Americans ($M = 2.16$, $SD = 1.93$) were significantly more positive than attitudes toward Activist Feminists ($M = .77$, $SD = 2.50$) and Mexican Americans ($M = 1.39$, $SD = 2.04$), Tukey's *HSD*, $p < .05$. In

addition, attitudes toward Mexican Americans were also significantly more positive than attitudes toward Activist Feminists, Tukey's *HSD*, $p < .05$.

Table 14

Mean Attitudes for the Three Targets African Americans, Activist Feminists, and Mexican Americans by Participants in Approach and Reward Conditions (Experiment 2)

	African Americans		Activist Feminists		Mexican Americans	
Condition	M	SD	M	SD	M	SD
Approach	2.06	1.82	0.62	2.58	1.23	1.96
Reward	2.25	2.05	0.91	2.41	1.54	2.12
Total	2.16[a]	1.93	0.77[b]	2.50	1.39[c]	2.04

Note: Total means with differing superscipts are significantly different, $p < .05$, Tukey's *HSD*.

Behaviors Toward the Groups

The central hypothesis for Experiment 2 was that groups known to elicit specific types of emotion, namely fear and anger, would elicit different amounts of willingness to behave depending on the specific types of behavioral opportunity. A target group known to elicit anger (Activist Feminists) (Cottrell & Newberg, 2005), for example, would be more likely to elicit willingness to behave in opportunities to punish a member of that group, whereas a target group known to elicit fear (African Americans) would be most likely to elicit willingness to avoid a member of the group.

Participants' endorsements of either the four approach-avoid behaviors or the four reward-punish behaviors were averaged to form either one index of approach-avoid behavior or

one index of reward-punish behavior for each of the three attitude targets: African Americans, Mexican Americans and Activist Feminists. A 3 (Target: African Americans, Activist Feminists, Mexican Americans) x 2 (Behavior Type: Approach, Reward) mixed model ANOVA was performed on the willingness to behave scores in which Target was a within-subjects factor and Behavior Type was the between-subjects factor. Table 15 shows the means from this ANOVA which yielded a significant main effect for Target, F (2, 312) = 63.26, $p < .001$. More importantly, the main effect for Target was qualified by a significant Target x Behavior Type interaction, F (2, 312) = 6.54, $p < .01$. Simple effect tests were subsequently performed to test for differences between behavior types for each of the three targets, African Americans, Activist Feminists and Mexican Americans.

African Americans. One facet of the central hypothesis was that groups known to be associated with fear (African Americans) would be less likely to elicit behavior that involves approaching than rewarding a member of that group. In other words, groups that are known to elicit fear are more likely to elicit avoidance behaviors (i.e. less approach behavior). As seen in the first column of Table 15, participants in the approach condition were more willing to engage in approach behaviors toward African Americans (M = 6.17, SD = 5.77) than participants in the reward condition were to engage in reward behaviors (M = 5.77, SD = 1.10), simple effect: F (1, 312) = 9.21, $p < .01$.

Activist Feminists. A second facet of the central hypothesis was that groups known to be associated with anger (Activist Feminists) would be less likely to elicit behavior that involves rewarding than approaching a member of that group. In other words, groups that are known to elicit anger are more likely to elicit behaviors that provide an opportunity to approach a member of the group (i.e. approach behavior, not avoid) rather than reward a member of the group (not reward). As seen in the second column of Table 15, participants in the approach condition were

no more willing to engage in approach behaviors toward Activist Feminists (M = 4.84, SD = 1.64) than participants in the reward condition were to engage in reward behaviors toward Activist Feminists (M = 5.08, SD = 1.42), simple effect: F (1, 312) = 3.33, *ns*.

Mexican Americans. In addition, it was hypothesized that groups known to be associated with equal amounts of anger and fear (Mexican Americans) would be no more likely to elicit behavior that involves approaching a member of that group than they would be to elicit behaviors that involve rewarding a member of that group. As seen in the third column of Table 15, participants in the approach condition were more willing to engage in approach behaviors toward Mexican Americans (M = 5.88, SD = 1.06) than participants in the reward condition were to engage in reward behaviors toward Mexican Americans (M = 5.61, SD = 1.18), simple effect: F (1, 312) = 3.96, $p < .05$.

Table 15

Mean Willingness to Perform Approach or Reward Behaviors Toward the Three Targets African Americans, Activist Feminists and Mexican Americans (Experiment 2)

	African Americans		Activist Feminist		Mexican Americans	
Behaviors	M	SD	M	SD	M	SD
Approach	6.17[a]	0.98	4.84[c]	1.64	5.88[d]	1.06
Reward	5.77[b]	1.10	5.08[c]	1.42	5.61[e]	1.18
Total	5.97	1.06	4.96	1.54	5.74	1.13

Note: Columns with differing superscripts are significantly different, $p < .05$.

Attitude-Behavior Consistency

Table 16 shows attitude-behavior correlations by condition for the three targets, African Americans, Activist Feminists and Mexican Americans. All the correlations were significant, $p < .05$, and the highest attitude-behavior consistency was toward Activist Feminists on approach-avoid behaviors, indicating that more positive attitude scores toward Activist Feminists are related to higher scores on willingness to engage in approach behaviors.

Table 16

Attitude-Behavior Correlations by Condition for the Three Targets African Americans, Activist Feminists and Mexican Americans (Experiment 2)

Condition	African Americans	Activist Feminists	Mexican Americans
Approach - Avoid (N = 79)	0.488**	0.782**	0.598**
Reward - Punish (N = 79)	0.533**	0.530**	0.475**

Note: ** $p < .001$

Participants' endorsements of either the four approach-avoid behaviors or the four reward-punish behaviors were averaged to form either one index of approach-avoid behavior or one index of reward-punish behavior for each of the three attitude targets: African Americans, Mexican Americans and Activist Feminists.

Next, the behavior index (approach-avoid or reward-punish) was standardized as a *z*-score. In addition, attitudes toward the three targets, African Americans, Mexican Americans and Activist Feminists that participants reported at the beginning of the experiment, were also standardized as *z*-scores. Three attitude-behavior incongruency scores for each participant were then calculated, one for each of the three targets. Participants in the approach-avoid condition had an approach-avoid attitude-behavior incongruency score for each of the three targets that consisted of the absolute difference between that participant's standardized attitude toward that target and that participant's standardized approach-avoid behavioral index score. Participants in the reward-punish condition had a reward-punish attitude–behavior incongruency score for each

of the three attitude targets that consisted of the absolute difference between that participant's standardized attitude toward that target and that participant's standardized reward-punish behavioral index score.

A 2 (Type of Attitude-Behavior Measure: approach-avoid, reward-punish) x 3 (Attitude Target: African Americans, Mexican Americans, Activist Feminists) mixed model ANOVA was performed on Attitude-Behavior Incongruency scores, with Attitude Target as the within-subjects factor and Type of Behavioral Measure as the between-subjects factor. As Table 17 shows, the ANOVA yielded a significant main effect for Target, F (1, 156) = 6.54, $p < .01$. Lower attitude-behavior incongruency scores indicate better attitude-behavior congruency. As the last row in Table 17 shows, attitude-behavior congruency was greatest for Activist Feminists (M = .61, SD = .53) followed by Mexican Americans (M = .77, SD = .61) and African Americans (M = .78, SD = .63). The main effect for Target, however, was not qualified by a Target x Behavior Type interaction, F (2, 312) = .48, *ns*. The last column in Table 17 shows the means for Behavior Type. Participants in the Approach-Avoid condition showed less attitude-behavior incongruency across targets (M = .65, SD = .43) than participants in the Reward-Punish condition (M = .80, SD = .45).

Table 17

Attitude-Behavior Congruency Scores by Condition for the Three Targets African Americans, Activist Feminists and Mexican Americans (Experiment 2)

	African Americans		Activist Feminists		Mexican Americans		Total	
Condition	M	SD	M	SD	M	SD	M	SD
Approach (N = 79)	0.73	0.64	0.54	0.43	0.67	0.56	0.65	0.43
Reward (N = 79)	0.84	0.62	0.68	0.61	0.88	0.64	0.80	0.45
Total	0.78[a]	0.63	0.61[b]	0.53	0.77[a]	0.61		

Note: Significant main effect for target. Wilks' $\lambda = .94$, $p < .01$. Row means with differing superscripts are significantly different by Tukey's *HSD*, $p < .05$. Significant main effect for condition, $p < .05$.

Willingness to Engage in Behaviors

Separate multiple regression analyses were used to predict behavior from attitudes, associated emotions pleasure, safety, anger and fear, threats, Need For Affect and Affect Intensity, toward African Americans, Activist Feminists, and Mexican Americans.

African Americans. The first regression was conducted to predict willingness to engage in approach behaviors toward African Americans from attitudes, associated emotions of pleasure, safety, anger and fear, threat, need for affect and affect intensity. Overall, these variables were significant in predicting willingness to engage in approach behaviors (N = 79) toward African Americans, $F(8, 69) = 6.72$, $p < .001$, and accounted for 43.8% of the variance.

As the first half of Table 18 shows, anger was a significant individual contributor in predicting willingness to engage in approach behaviors toward African Americans, even controlling for attitudes. As associated anger toward African Americans increased, willingness to engage in approach behaviors toward African Americans decreased (*Beta* = -.282, $p < .05$). Threat associated with African Americans was close to being a significant individual contributor, (*Beta* = -.16, $p = .051$). As associated threat increased, willingness to engage in approach behaviors decreased. Attitudes, associated emotions of pleasure, safety and fear, and the individual difference measures need for affect and affect intensity were not significant individual contributors in predicting willingness to engage in approach behaviors toward African Americans.

The second regression was conducted to predict willingness to engage in reward behaviors toward African Americans from attitudes, associated emotions of pleasure, safety, anger and fear, threat, need for affect and affect intensity. Overall, these variables were significant in predicting willingness to engage in reward behaviors (N = 79) toward African Americans, F (8, 70) = 7.41, $p < .001$, and accounted for 45.8% of the variance. As the bottom half of Table 18 shows, attitudes and threats were significant individual contributors in predicting willingness to engage in approach behaviors toward African Americans, all *t*s, $p < .05$. Associated emotions of safety, anger and fear, threat, and the individual difference measures need for affect and affect intensity were not significant individual contributors in predicting willingness to engage in approach behaviors toward African Americans. Associated emotions of pleasure was a marginally significant individual predictor, $p = .07$. As attitudes toward African Americans became more positive, willingness to engage in reward behaviors toward African Americans increased (*Beta* = .264, $p < .05$). As threats associated with African Americans increased, willingness to engage in reward behaviors decreased (*Beta* = -.242, $p < .05$).

Table 18

Multiple Regression Analyses of Attitude, Associated Emotions of Pleasure, Safety, Anger and Fear and Threat toward African Americans on Willingness to Engage in Approach or Reward Behaviors toward African Americans (N = 157) (Experiment 2)

	Unstandardized B	SE	Beta	*t*	*p*
Approach (N = 78)					
Attitude	0.081	0.067	0.153	1.21	0.232
Pleasure Emotions	0.058	0.084	0.116	0.68	0.496
Safety Emotions	0.007	0.082	0.014	0.09	0.929
Anger Emotions	**-0.158**	**0.071**	**-0.282**	**-2.23**	**0.029**
Fear Emotions	-0.006	0.067	-0.011	-0.09	0.928
Threats	**-0.160**	**0.080**	**-0.234**	**-1.99**	**0.051**
Need For Affect	0.002	0.006	0.043	0.36	0.719
Affect Intensity	0.006	0.005	0.132	1.10	0.274
Reward (N = 79)					
Attitude	**0.142**	**0.059**	**0.264**	**2.41**	**0.018**
Pleasure Emotions	0.152	0.083	0.255	1.83	0.071
Safety Emotions	0.051	0.080	0.087	0.64	0.526
Anger Emotions	-0.052	0.076	-0.086	-0.69	0.494
Fear Emotions	0.062	0.083	0.090	0.74	0.460
Threats	**-0.182**	**0.090**	**-0.242**	**-2.02**	**0.047**
Need For Affect	-0.002	0.006	-0.030	-0.29	0.769
Affect Intensity	0.007	0.007	0.100	0.92	0.362

Note: Significant predictors are presented in bold font.

Activist Feminists. Multiple regressions were also used to predict willingness to engage in approach and reward behaviors toward Activist Feminists from attitudes, associated emotions (pleasure, safety, anger and fear), threat and individual difference measures (Need for Affect and Affect Intensity). Overall, these variables were significant in predicting willingness to engage in approach behaviors (N = 79) toward Activist Feminists, F (8, 70) = 16.47, $p < .001$, and accounted for 65.3% of the variance. As the top half of Table 19 shows, attitudes and associated anger were significant individual contributors in predicting willingness to engage in approach behaviors toward Activist Feminists. As attitude became more positive, willingness to engage in approach behaviors toward Activist Feminists increased (*Beta* = .404 $p < .001$). As associated anger toward Activist Feminists increased, willingness to engage in approach behaviors toward Activist Feminists decreased (*Beta* = -.210, $p < .05$). Associated emotions of pleasure, safety and fear, threat and the individual difference measures need for affect and affect intensity were not significant individual contributors in predicting willingness to engage in approach behaviors toward Activist Feminists.

A second regression was conducted to predict willingness to engage in reward behaviors toward Activist Feminists from attitudes, associated emotions of pleasure, safety, anger and fear, threat, need for affect and affect intensity. Overall, these variables were significant in predicting willingness to engage in reward behaviors (N = 79) toward Activist Feminists, F (8, 70) = 5.63, $p < .01$, and accounted for 39.2% of the variance. As the bottom half of Table 19 shows, attitudes and pleasure emotions were significant individual contributors in predicting willingness to engage in approach behaviors toward Activist Feminists, all *t*s, $p < .05$. Associated emotions of safety, anger and fear, and threats were not significant individual contributors. In addition, individual difference measures need for affect and affect intensity were also not significant individual contributors. As attitudes toward Activist Feminists became more positive,

willingness to engage in reward behaviors toward Activist Feminists increased (*Beta* = .354, $p <$ .01). As emotions of pleasure associated with Activist Feminists increased, willingness to engage in reward behaviors toward Activist Feminists increased (*Beta* = .343, $p < .05$). Associated emotions of safety, anger and fear, threat and the individual difference measures need for affect and affect intensity were not significant individual contributors in predicting willingness to engage in reward behaviors toward Activist Feminists.

Table 19

Multiple Regression Analyses of Attitude, Associated Emotions of Pleasure, Safety, Anger and Fear and Threat toward Activist Feminists on Willingness to Engage in Approach or Reward Behaviors toward Activist Feminists (N = 158) (Experiment 2)

	Unstandardized B	SE	Beta	*t*	*p*
Approach (N = 79)					
Attitude	**0.404**	**0.072**	**0.637**	**5.648**	**0.000**
Pleasure Emotions	-0.011	0.100	-0.013	-0.113	0.910
Safety Emotions	-0.032	0.084	-0.034	-0.378	0.707
Anger Emotions	**-0.210**	**0.092**	**-0.275**	**-2.283**	**0.025**
Fear Emotions	-0.036	0.117	-0.027	-0.311	0.757
Threats	0.153	0.100	0.126	1.525	0.132
Need For Affect	-0.003	0.007	-0.034	-0.401	0.690
Affect Intensity	0.000	0.006	-0.003	-0.034	0.973
Reward (N = 79)					
Attitude	**0.209**	**0.078**	**0.354**	**2.670**	**0.009**
Pleasure Emotions	**0.246**	**0.115**	**0.343**	**2.136**	**0.036**
Safety Emotions	0.059	0.086	0.084	0.688	0.494
Anger Emotions	0.018	0.105	0.030	0.174	0.862
Fear Emotions	-0.037	0.112	-0.040	-0.330	0.743
Threats	0.018	0.103	0.019	0.173	0.863
Need For Affect	0.007	0.008	0.095	0.866	0.389
Affect Intensity	-0.005	0.010	-0.060	-0.501	0.618

Note: Significant predictors are presented in bold font.

Mexican Americans. Finally, multiple regressions were used to predict willingness to engage in approach and reward behaviors toward Mexican Americans from attitudes, associated emotions (pleasure, safety, anger and fear), threat and individual difference measures (need for affect and affect intensity). Overall, these variables were significant in predicting willingness to engage in approach behaviors (N = 79) toward Mexican Americans, F (8, 70) = 9.57, $p < .001$, and accounted for 52.2% of the variance. As the top half of Table 20 shows, attitudes and associated threats were significant individual contributors in predicting willingness to engage in approach behaviors toward Mexican Americans. As attitudes became more positive, willingness to engage in approach behaviors toward Mexican Americans increased (*Beta* = .315 $p < .01$). As associated threats toward Mexican Americans increased, willingness to engage in approach behaviors toward Mexican Americans decreased (*Beta* = -.265, $p < .05$). Associated emotions of pleasure, safety, anger and fear, and the individual difference measures need for affect and affect intensity were not significant individual contributors in predicting willingness to engage in approach behaviors toward Mexican Americans.

A second regression was conducted to predict willingness to engage in reward behaviors toward Mexican Americans from attitudes, associated emotions of pleasure, safety, anger and fear, threat, need for affect and affect intensity. Overall, these variables were significant in predicting willingness to engage in reward behaviors (N = 79) toward Mexican Americans, F (8, 70) = 6.50, $p < .001$, and accounted for 47.5% of the variance. As the bottom half of Table 20 shows, attitudes and emotions of pleasure were significant individual contributors in predicting willingness to engage in approach behaviors toward Mexican Americans, all *t*s, $p < .05$. As attitudes toward Mexican Americans became more positive, willingness to engage in reward behaviors toward Mexican Americans increased (*Beta* = .223, $p < .05$). As emotions of pleasure associated with Mexican Americans increased, willingness to engage in reward behaviors toward

Mexican Americans increased (*Beta* = .298 $p < .05$). Associated emotions of safety, anger and fear, threat and the individual difference measures need for affect and affect intensity were not significant individual contributors in predicting willingness to engage in reward behaviors toward Mexican Americans.

Table 20

Multiple Regression Analyses of Attitude, Associated Emotions of Pleasure, Safety, Anger and Fear and Threat toward African Americans on Willingness to Engage in Approach or Reward Behaviors toward Mexican Americans (N = 158) (Experiment 2)

	Unstandardized B	SE	Beta	*t*	*p*
Approach (N = 79)					
Attitude	**0.170**	**0.062**	**0.315**	**2.75**	**0.008**
Pleasure Emotions	0.061	0.078	0.100	0.78	0.437
Safety Emotions	0.029	0.077	0.047	0.37	0.712
Anger Emotions	-0.092	0.075	-0.161	-1.23	0.222
Fear Emotions	-0.027	0.070	-0.042	-0.38	0.702
Threats	**-0.165**	**0.075**	**-0.265**	**-2.19**	**0.032**
Need For Affect	0.000	0.006	0.001	0.01	0.992
Affect Intensity	-0.003	0.005	-0.065	-0.60	0.547
Reward (N = 79)					
Attitude	**0.124**	**0.056**	**0.223**	**2.22**	**0.030**
Pleasure Emotions	**0.210**	**0.090**	**0.298**	**2.34**	**0.022**
Safety Emotions	0.068	0.084	0.103	0.81	0.420
Anger Emotions	-0.120	0.078	-0.174	-1.53	0.130
Fear Emotions	0.036	0.069	0.054	0.52	0.601
Threats	-0.100	0.084	-0.146	-1.19	0.236
Need For Affect	0.004	0.006	0.056	0.55	0.583
Affect Intensity	0.002	0.008	0.029	0.26	0.793

Note: Significant predictors are presented in bold font.

Summary

Experiment 2 found differences in the emotions associated with the attitude targets, African Americans and Activist Feminists. Activist Feminist were found to elicit less associated emotions of fear and more associated emotions of anger than either African Americans or Mexican Americans (see Table 12). These findings were exactly as predicted.

Experiment 2 also examined differences in threats associated with the attitude targets African Americans, Activist Feminists and Mexican Americans. Activist Feminists, in addition to eliciting less fear, also elicited lower threats to personal safety and physical harm than did either African Americans or Mexican Americans (see Table 13). Interestingly, Mexican Americans elicited greater threats to economic resources and rights and freedoms than did either African Americans or Activist Feminists (see Table 13).

Attitudes towards the three targets African Americans, Activist Feminists and Mexican Americans were examined. Analyses revealed that attitudes were most positive toward African Americans and least positive toward Activist Feminists, with Mexican Americans in between (see Table 14).

Differences in willingness to engage in approach and reward behaviors toward the three target groups African Americans, Activist Feminists and Mexican Americans were addressed in Experiment 2. Participants were more willing to approach African Americans and Mexican Americans than Activist Feminists. In addition, they were also more willing to reward African Americans and Mexican Americans than Activist Feminists, but the differences were not as pronounced. Participants were more willing to approach than reward African Americans and Mexican Americans, but not Activist Feminists (see Table 15).

The relationship between attitudes and behavior was also investigated. Attitudes predicted behavior better on approach than reward behaviors, and also predicted behavior better

toward Activist Feminists than toward either African Americans or Mexican Americans (see Tables 16 and 17).

Finally, multiple regressions showed that when controlling for attitudes, anger and perceived threat predicted approaching African Americans, anger predicted approaching Activist Feminists, and perceived threat predicted approaching Mexican Americans. Controlling for attitudes, perceived threat predicted rewarding African Americans (see Table 18), and pleasurable emotions predicted rewarding Activist Feminists (see Table 19) and Mexican Americans (see Table 20).

These results are summarized in Table 21. The first two rows of the table show that, consistent with the results reported by Cottrell and Newberg (2005), African Americans were expected to elicit greater fear and less anger than Activist Feminists. This prediction was supported. The next two rows of the table show that, consistent with results reported by Cottrell and Newberg (2005), African Americans were expected to elicit greater personal safety and physical harm threats and less economic resources and rights threat than Activist Feminists. This prediction was also supported. The fifth and sixth rows of the table show that attitude-behavior consistency was expected to be greater for African Americans with approach-avoid than reward-punish behavioral measures, and the opposite was expected to be true for Activist Feminists. The observed results were not consistent with these predictions. Finally, the next four rows of the table show that, controlling for attitudes, fear was expected to pose a significant contribution to avoiding African Americans, but it did not. Similarly, controlling for attitudes, anger was expected to pose a significant contribution to punishing Activist Feminists, but it did not. In addition, anger was expected to pose an independent contribution to punishing but not avoiding, and exactly the opposite results were observed for both African Americans and Activist Feminists.

Table 21.

Summary of Predicted and Observed Results for Experiment 2

	Predicted		Observed	
	African Americans	Activist Feminists	African Americans	Activist Feminists
Emotions				
Fear	Hi	Lo	Hi	Lo
Anger	Lo	Hi	Lo	Hi
Threats				
Safety/Harm Threat	Hi	Lo	Hi	Lo
Resources/Rights Threat	Lo	Hi	Lo	Hi
Attitude-Behavior Consistency				
ABC Approach-Avoid	Hi	Lo	Lo	Hi
ABC Reward-Punish	Lo	Hi	Lo	med
Emotion→ Behavior				
Fear→ Avoid	Hi	Lo	Lo	Lo
Anger→ Avoid	Lo	Lo	Hi	Hi
Fear→ Punish	Lo	Lo	Lo	Lo
Anger→ Punish	Lo	Hi	Lo	Lo

Note: Summary is taken from results found in associated tables. "Hi" and "Lo" represent relative numbers based on scale points for each finding. See associated Tables 12-20 for corresponding values.

General Discussion

Past research on the emotions associated with attitudes has investigated the extent to which specific types of emotions lead to actions (Seitz, Lord & Taylor, 2007). Emotion theorists suggest that emotions can be action tendencies or impulses to actions (Lang, 1995; Frijda, 1986). Research in neurobiology suggests that behaviors can be thought of in terms of originating from two systems, one of approach (Behavioral Approach System, Gray, 1972) that is associated with positive behaviors and one of inhibition (Behavioral Inhibition System, Gray, 1972) that is associated with negative behaviors. In addition, neurobiologists have found that specific emotions are linked to each of these behavioral systems. The emotion fear, for example, is linked to the right pre-frontal cortex that is theorized to involve the Behavioral Inhibition System and known for further association with approach-avoid behaviors. The emotion anger, on the other hand, is linked to the left pre-frontal cortex and associated with the Behavioral Approach System, known for further association with reward-punish behaviors. Finally, research on prejudice suggests a functional specificity to emotion where specific social groups evoke specific emotions that may be linked to specific types of action, mainly actions of fight (reward-punish) or flight (approach-avoid), and with specific types of threat such as obstacles or safety (Cottrell & Neuberg, 2005).

The present research was composed of two experiments. Experiment 1 was designed to demonstrate that the emotions primed to be associated with an attitude target would lead to specific types of behavior according to the function of the emotion that was primed. Participants

primed to associate fear with their attitudes toward Mexican Americans were predicted to report a higher willingness to engage in attitude-congruent approach-avoid behaviors toward Mexican Americans than participants primed to associate anger with their attitudes. Participants primed to associate anger with their attitudes toward Mexican Americans, on the other hand, were predicted to report higher willingness to engage in attitude-congruent reward-punish behaviors toward Mexican Americans than participants primed to associate fear with their attitudes.

Fear was manipulated by asking some participants to explain why in some circumstances Mexican Americans might make them afraid (fear). The manipulation of fear was successful. Participants who wrote about why Mexican Americans might make people afraid later reported associating higher levels of fear than anger with Mexican Americans. Anger was manipulated by asking participants to write about how Mexican Americans might make them feel angry. This manipulation was not successful. Instead of associating high levels of anger with Mexican Americans, participants in the anger condition associated lower levels of anger than fear with Mexican Americans. Another manipulation check involved the threats participants associated with Mexican Americans. It was predicted that participants in the fear condition would associate higher levels of safety/harm threats with Mexican Americans than participants in the anger condition. Instead, participants in both conditions associated equally high amounts of safety/harm threats with Mexican Americans. The primary dependent measure was attitude-behavior consistency. It was predicted that participants in the fear condition would display greater attitude-behavior consistency on the approach-avoid measures than participants in the anger condition. This hypothesis was not supported. It was also predicted that participants in the anger condition would display greater attitude-behavior consistency on the reward-punish measures than participants in the fear condition. This hypothesis was supported. These results may be interpreted as partial support for the central hypothesis.

Experiment 2 was designed to demonstrate that specific emotions associated with an attitude target can lead to better attitude-behavior consistency when the behavioral opportunity matches the functional specificity of the emotion. Past research at Arizona State University and a pretest completed at Texas Christian University both found that different social groups elicit specific emotions. Fear, for example, was elicited by African Americans, whereas Anger was elicited by Activist Feminists. If specific emotions can be activated by specific targets, then specific emotions might lead to better attitude-behavior consistency when the emotion associated with the attitude is one that leads to a specific type of behavioral opportunity that matches in functionality. Fear, for example, has been found to lead to approach-avoid behaviors. Anger, in contrast, leads to reward-punish behaviors. Experiment 2 was designed to apply theory borrowed from research on emotion, neurobiology and prejudice to attitudes toward social groups that differ in which type of negative emotion they elicit. Experiment 2 measured attitudes, emotions, threats and behaviors toward three social groups: African Americans, Activist Feminists and Mexican Americans. Contrasts were expected to occur between African Americans and Activist Feminists because in previous studies (c.f., Cottrell & Neuberg, 2005) African Americans have been associated with fear and Activist Feminists have been associated with anger. Mexican Americans have been associated with equal amounts of fear and anger and were expected to be intermediate between African Americans and Activist Feminists on most measures. The manipulation check for emotions produced the predicted results. Participants associated more fear with African Americans than with Activist Feminists and they associated more anger with Activist Feminists than with African Americans. The manipulation check for threats also produced the predicted results. Participants associated more safety/harm threat with African Americans than with Activist Feminists and they associated more resources/rights threat with Activist Feminists than with African Americans. The results for attitude-behavior

consistency in Experiment 2 were not as consistent with predictions. Instead of showing more attitude-behavior consistency on approach-avoid measures for African Americans than for Activist Feminists, participants did exactly the opposite. They showed more attitude-behavior consistency on approach-avoid measures for Activist Feminists than for African Americans. The reward-punish measures produced results more consistent with predictions in that participants displayed somewhat more attitude-behavior consistency on reward-punish measures for Activist Feminists than for African Americans.

The present research extends support to several different fields of research. First, the present research supported and validated emotion theory on the specificity of emotions leading to action tendencies (Frijda, 1986; Izard, 1991; Plutchick, 1980). Manipulated anger led to tendencies to punish versus reward in the present Experiment 1. Second, the present research extended the work of Cottrell & Neuberg (2005) by providing an experimental study of the emotions that are associated with several social groups. Cottrell & Neuberg's (2005) study was correlational, whereas the present Experiment 1 manipulated emotions and the manipulation produced the predicted levels of fear (but not anger) toward a target that was supposed to elicit equal amounts of fear and anger without a manipulation. In addition, the findings of the present research were consistent with those of past physiological research that investigated the link between different types of emotion (e.g., fear, anger) and the different behavioral systems and associated behaviors (approach-avoid and reward-punish) (Carver, 2004; Harmon-Jones & Allen, 1998; Harmon-Jones & Sigelman, 2001). The present research did not employ physiological measures, but the results were consistent with previous work showing that anger is associated with the behavioral approach system (BAS) rather than the behavioral inhibition system (BIS) (Gray, 1972). The results only partially supported predictions relevant to the BAS and BIS. Finally, the present research extended the literature on Attitude Representation Theory

(ART) by more precisely defining the emotions part of the attitude object representation (Lord & Lepper, 1999). The original ART model did not explicitly define the different types of emotions that might be part of an attitude representation for a social group. The present research further explicated the theory by indicating the types of emotions that might be involved in attitude representations.

The present experiments provided some support and validation for past work by emotion theorists regarding the functional specificity of emotions. Different events are suggested to elicit different emotions, which are then theorized to lead to specific action tendencies (Frijda, 1986; Plutchick, 1980; Izard, 1991). A threat to physical safety, for example, may be linked to the specific emotion fear, which in turn elicits the action tendency to escape, thereby providing the adaptive outcome of safety. A threat of an obstacle, in contrast, may be linked to the specific emotion anger, which in turn elicits the action tendency to attack, thereby providing the adaptive outcome of destruction or removal of the obstacle. The present research adds to Cottrell and Neuberg's (2005) findings on ways in which specific emotions and specific threats might be linked in relation to attitude-relevant behaviors toward specific social groups.

The design of the present experiments also allowed the present research to extend the work on prejudice by Cottrell & Neuberg (2005). Cottrell and Neuberg (2005) found a direct link between specific threats/events and associated emotions. Their research, however, was strictly correlational and did not provide a manipulation of emotions associated with a social group. The present research not only involved the manipulation of emotions associated with a social group, but also added to the work of Cottrell & Neuberg (2005) by measuring the relationship between threats and emotions and the specific action tendencies they elicit. Cottrell and Neuberg (2005) did not investigate the link between specific emotions and behavior. Finally, the present research also investigated both manipulated (Experiment 1) and pre-existing

(Experiment 2) emotions and the resulting behavior. The present research investigated not only the effects of specific threats and emotions on specific types of behavior, but also integrated past research on emotion specificity with the study of attitude-behavior consistency.

In addition, the findings of the present research were partially consistent with those of past physiological research that investigated the link between different types of emotion (e.g., fear, anger) and the different behavioral systems and associated behaviors (approach-avoid and reward-punish) (Carver, 2004; Harmon-Jones & Allen, 1998; Harmon-Jones & Sigelman, 2001). Past research by Carver (2004) found a link between the emotion anger and the behavioral approach system (BAS) (Gray, 1972). According to Carver's (2004) findings, BAS sensitivity was better predicted by reports of anger in response to scenarios such as "someone leaning on your brand new car" or "someone accusing you of cheating after just cheating off of you". The results of the present research fit within those of Carver (2004) in two ways. First, the measure of Carver's approach behavior (willingness to reward/punish a social group) corresponded with Carver's measure of the behavioral approach system (reward responsiveness). Second, the present research mirrored Carver's results. Individuals in the present Experiment 1, who experienced anger toward Mexican Americans, were more attitude consistent in their reward-punish behaviors toward that social group.

Furthermore, the present research corresponded with two additional physiological investigations of the emotion anger and association with approach behaviors, even though the present research did not use any physiological measures to assess approach behavior. In the first relevant study, Harmon-Jones and Allen (1998) investigated individual differences in trait anger. Higher levels of trait anger were found to be related to higher levels of left frontal activity (EEG level) and lower levels of right frontal activity (EEG level), suggesting a link between anger and the approach system (known to be associated with high activity in left frontal cortex). In the

second relevant study, researchers (Harmon-Jones & Sigelman, 2001) also found a link between anger and the approach system after inducing some people to experience anger (induced state) but not others, and then examined cortical activity. Harmon-Jones and Sigelman (2001) found higher amounts of relative left frontal activity (EEG) in those induced to experience anger, further providing evidence that anger relates to greater engagement of the approach system. Greater engagement of the approach system in Harmon-Jones and Sigelman's (2001) study was measured as the extent to which an individual, induced to feel anger toward another individual, would punish the other individual by making him drink 33 ounces of a beverage varying in unpleasantness (sugar, apple juice, lemon juice, salt, vinegar, chili powder). The present research found results partially consistent with these findings (Harmon-Jones & Allen, 1998; Harmon-Jones & Sigelman, 2001) in two ways. First, the present research replicated results suggesting a link between the emotion of anger and reward behaviors. Second, Harmon-Jones and Sigelman (2001) found that anger-related relative left-prefrontal activity was linked to behaviors of approach and attack (punish). In the present study, anger was linked to behaviors that involved approaching a social group to attack (punish) that social group (e.g., less willing to admit a Mexican American to a selective graduate program).

In addition, the present research produced results that extend Attitude Representation Theory (Lord & Lepper, 1999) by adding to the ways that emotions are included in an attitude representation. Lord and Lepper's ART model only discusses the valence (positive-negative) of emotions that are part of the attitude object's representation. In a relevant study, Seitz, Lord and Taylor (2007) extended the way that emotions are included in attitude representation by measuring not the valence, but the activity of emotions included in an attitude representation. Seitz et al. (2007) extended ART by showing that emotions can be identified as being relatively passive or relatively active and that this measurement of activity (passive vs active) has

consequences for attitude-behavior consistency even when controlling for valence. Individuals who associate relatively active emotions with their attitudes are more inclined to behave in line with their attitudes, thus resulting in greater attitude-behavior consistency. The present research added to the recent work by Seitz, Lord and Taylor (2007), extending the way we define the emotions that are part of an attitude object's representation by showing that emotions engender a functional specificity, with consequences for attitude-behavior consistency. The emotion anger, for example, was found in Experiment 1 to create attitude-behavior consistency for intentions to reward or punish Mexican Americans or approach (aggression) behaviors with the intent to reward or punish the attitude object.

The present experiments, however, had some important limitations. First, the emotion fear was expected to result in specificity for avoidance behaviors with the intent to approach or avoid Mexican Americans (Experiment 1) and African Americans (Experiment 2). This prediction, however was not supported. Second, the emotion prime may have been flawed. The directions for the emotion prime asked participants to think of situations in which the target group, Mexican Americans, may make them feel some degree of anger or fear. A possible problem with this manipulation is that certain types of fear, such as fear of losing jobs, might inadvertently prime anger as well as fear, especially for this particular target group. Possible revisions to the current emotion prime could involve having participants think of situations in which the target group may make people in general (rather than just themselves) feel some degree of anger or fear, and using targets other than Mexican Americans. Finally, the behavioral measures used in the present research were intended to measure approach-avoid behaviors and reward-punish-behaviors. In actuality, however, the behavioral measures only assessed one of the two poles for each of these bi-polar behaviors (approach-avoid, reward-punish). The approach-avoid behavioral measure, for example, was comprised of behaviors involving ways to

approach a member of the target group (e.g., accept as a neighbor, accept as one's boss). The reward-punish behavioral measure, on the other hand, was comprised of behaviors involving ways to reward a member of the target group (e.g., praise, admit to a selective graduate program). One way to improve the behavioral measures of the present research may be to employ actual behaviors that measure both sides of the approach-avoid and reward-punish dimensions. Harmon-Jones and Sigelman (2001) for example, measured participants' reward-punish behavior by having participants assign a drink substance to be mixed with water and given to an unknown confederate who had just either complemented or insulted the participant. The beverage substances ranged in degree of reward (sugar, apple juice, lemon juice) or punishment (salt, vinegar, chili powder). Selecting the substance sugar, for example, would be an actual measure of reward behavior. Selecting the substance chili powder, on the other hand, would be an actual measure of punish behavior. If the theory behind the present research is derived from research on fight versus flight, then measures that involve punishing and avoiding might be more appropriate, and yield more interpretable results, than measures that involve rewarding and approaching.

Despite these limitations, the present research added to the recent literature extending Attitude Representation Theory (Lord & Lepper, 1999) by showing that some emotions included in the attitude object's representation may involve specific action tendencies (reward/punish; approach/avoid) that result in consequences for attitude-behavior consistency. Given that the present research partially supported the central hypothesis that emotions associated with social groups have a functional specificity leading to action tendencies with consequences for attitude-behavior consistency, possible future directions include a meta-analysis of target groups in studies of attitude-behavior consistency.

The present research may be extended further by performing a meta-analysis of target groups and the type of behavior used to measure attitude-behavior consistency. The effect would be supported if a functional specificity could be found in the attitude-behavior consistency literature. The opportunities of finding such support through meta-analysis, however, could be limited. One problem could arise with maturation of culture. If social groups pose different threats at different points in a culture's history, an emotion elicited by a particular social group in the 1940s, for example, may be different from the emotion elicited by that same social group in the 1990s through the 21st century. African Americans, for example, may have elicited anger in the 1940s through the 1960s and have been found to elicit fear in 2005 (Cottrell & Neuberg, 2005). As times change, so might the links between emotions, threats, attitudes and behaviors toward specific social groups.

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Appendix A

Instructions:
Please answer the following questions by circling one of the answers.

What is your attitude towards **politicians?**

-5 -4 -3 -2 -1 0 1 2 3 4 5
Extremely Negative — Extremely Positive

What is your attitude towards **African Americans**?

-5 -4 -3 -2 -1 0 1 2 3 4 5
Extremely Negative — Extremely Positive

What is your attitude towards **Newscasters**?

-5 -4 -3 -2 -1 0 1 2 3 4 5
Extremely Negative — Extremely Positive

What is your attitude towards **Activist Feminists**?

-5 -4 -3 -2 -1 0 1 2 3 4 5
Extremely Negative — Extremely Positive

What is your attitude towards **Fundamental Christians**?

-5 -4 -3 -2 -1 0 1 2 3 4 5
Extremely Negative — Extremely Positive

What is your attitude towards **European Americans**?

-5 -4 -3 -2 -1 0 1 2 3 4 5
Extremely Negative — Extremely Positive

What is your attitude towards **Mexican Americans**?

-5 -4 -3 -2 -1 0 1 2 3 4 5
Extremely Negative — Extremely Positive

Appendix B

The United States Congress and United States Senate are considering legislation on immigration and other issues of relevance to Mexican American Immigrants. We are interested in exploring the emotions that people associate with Mexican American Immigrants.

In the spaces provided below, please write a paragraph explaining what it is about Mexican American Immigrants that might, at least in some situations, make you feel frightened, and terrified.

What is it about Mexican American Immigrants that might, at least in some situations, make you feel ***frightened***?

_____

_____

_____

_____

_____

_____

_____

_____

What is it about Mexican American Immigrants that might, at least in some situations, make you feel ***terrified***?

_____

_____

_____

_____

_____

_____

In the spaces provided below, please write a paragraph explaining what it is about Mexican American Immigrants might, at least in some situations, make you feel worried, and fearful.

What is it about Mexican Americans Immigrants that might, at least in some situations, make you feel ***worried***?

What is it about Mexican American Immigrants that might, at least in some situations, make you feel ***fear***?

Appendix C

The United States Congress and United States Senate are considering legislation on immigration and other issues of relevance to Mexican American Immigrants. We are interested in exploring the emotions that people associate with Mexican American Immigrants.

In the spaces provided below, please write a paragraph explaining what it is about Mexican American Immigrants that might, at least in some situations, make you feel some antagonism and rage.

What is it about Mexican American Immigrants that might, at least in some situations, make you feel some ***antagonism***?

_____

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What is it about Mexican Americans that might, at least in some situations, make you feel ***rage***?

_____

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_____

In the spaces provided below, please write a paragraph explaining what it is about Mexican American Immigrants that might, at least in some situations, make you feel hostility and resentment.

What is it about Mexican Americans that might, at least in some situations, make you feel ***hostility***?

_____

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What is it about Mexican Americans that might, at least in some situations, make you feel ***resentment***?

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Appendix D

The University is interested in knowing more about your perceptions, opinions, experiences and expectations of the classes that you have had, are taking, or plan to take here at TCU.

In the spaces provided on the following pages, please write five separate paragraphs explaining your perceptions, opinions, experiences and expectations of five classes that you have had, are taking presently, or plan to take here at TCU.

Class # 1_____ **Semester**: _____

_____

_____

_____

_____

_____

_____

_____

Class # 2_____ **Semester**: _____

_____

_____

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_____

_____

_____

_____

_____

In the spaces provided on the following pages, please write five separate paragraphs explaining your perceptions, opinions, experiences and expectations of classes that you have had, are taking presently, or plan to take here at TCU.

Class # 3_____ **Semester**: _____

Class # 4_____ **Semester** : _____

Appendix E

Approach-Avoid Behaviors

Using the scale provided, please read each question and place a mark on the scale that best represents your willingness to engage in the behavior.

Try, if at all possible, not to give the same rating or mark to two or more questions on this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how willing you would be to engage in the behavior, if given the opportunity.

If given the opportunity……
(Place a mark on the scale to answer each question)

1. How willing would you be to accept a **European American** as your boss?

1 _ _ _ _ _ _	2 _ _ _ _ _ _	3 _ _ _ _ _ _	4 _ _ _ _ _ _	5 _ _ _ _ _ _	6 _ _ _ _ _ _	7
Not at Willing			Somewhat Willing			Very Much Willing

2. How willing would you be to accept a **Mexican American Immigrant** as your boss?

1 _ _ _ _ _ _	2 _ _ _ _ _ _	3 _ _ _ _ _ _	4 _ _ _ _ _ _	5 _ _ _ _ _ _	6 _ _ _ _ _ _	7
Not at Willing			Somewhat Willing			Very Much Willing

3. How willing would you be to accept a **Gay Man** as your boss?

1 _ _ _ _ _ _	2 _ _ _ _ _ _	3 _ _ _ _ _ _	4 _ _ _ _ _ _	5 _ _ _ _ _ _	6 _ _ _ _ _ _	7
Not at Willing			Somewhat Willing			Very Much Willing

4. How willing would you be to accept an **African American** as your boss?

1 _ _ _ _ _ _	2 _ _ _ _ _ _	3 _ _ _ _ _ _	4 _ _ _ _ _ _	5 _ _ _ _ _ _	6 _ _ _ _ _ _	7
Not at Willing			Somewhat Willing			Very Much Willing

5. How willing would you be to accept an **Activist Feminist** as your boss?

1 _ _ _ _ _ _	2 _ _ _ _ _ _	3 _ _ _ _ _ _	4 _ _ _ _ _ _	5 _ _ _ _ _ _	6 _ _ _ _ _ _	7
Not at Willing			Somewhat Willing			Very Much Willing

Using the scale provided, please read each question and place a mark on the scale that best represents your willingness to engage in the behavior.

Try, if at all possible, not to give the same rating or mark to two or more questions on this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how willing you would be to engage in the behavior, if given the opportunity.

If given the opportunity……
(Place a mark on the scale to answer each question)

1. How willing would you be to accept a **European American** as a work colleague?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

2. How willing would you be to accept a **Mexican American Immigrant** as a work colleague?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

3. How willing would you be to accept a **Gay Man** as a work colleague?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

4. How willing would you be to accept an **African American** as a work colleague?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

5. How willing would you be to accept an **Activist Feminist** as a work colleague?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

Using the scale provided, please read each question and place a number on the scale that best represents your willingness to engage in the behavior.

Try, if at all possible, not to give the same rating or mark to two or more questions on this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how willing you would be to engage in the behavior, if given the opportunity.

If given the opportunity……
(Place a mark on the scale to answer each question)

1. How willing would you be to accept a **European American** as a neighbor?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

2. How willing would you be to accept a **Mexican American Immigrant** as a neighbor?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

3. How willing would you be to accept a **Gay Man** as a neighbor?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

4. How willing would you be to accept an **African American** as a neighbor?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

5. How willing would you be to accept an **Activist Feminist** as a neighbor?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

Using the scale provided, please read each question and place a mark on the scale that best represents your willingness to engage in the behavior.

Try, if at all possible, not to give the same rating or mark to two or more questions on this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how willing you would be to engage in the behavior, if given the opportunity.

If given the opportunity……
(Place a mark on the scale to answer each question)

1. How willing would you be to have a **European American** as a casual acquaintance?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

2. How willing would you be to have a **Mexican American Immigrant** as a casual acquaintance?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

3. How willing would you be to have a **Gay Man** as a casual acquaintance?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

4. How willing would you be to have an **African American** as a casual acquaintance?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

5. How willing would you be to have an **Activist Feminist** as a casual acquaintance?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

Reward – Punish Behaviors

Using the scale provided, please read each question and place a mark on the scale that best represents your willingness to engage in the behavior.

Try, if at all possible, not to give the same rating or mark to two or more questions on this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how willing you would be to engage in the behavior, if given the opportunity.

If given the opportunity……
(Place a mark on the scale to answer each question)

1. How willing would you be to give a **European American** a promotion?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

2. How willing would you be to give a **Mexican American** a promotion?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

3. How willing would you be to give a **Gay Man** a promotion?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

4. How willing would you be to give an **African American** a promotion?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

5. How willing would you be to give an **Activist Feminist** a promotion?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

Using the scale provided, please read each question and place a mark on the scale that best represents your willingness to engage in the behavior.

Try, if at all possible, not to give the same rating or mark to two or more questions on this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how willing you would be to engage in the behavior, if given the opportunity.

If given the opportunity……
(Place a mark on the scale to answer each question)

1. How willing would you be to give a **European American** a gift?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

2. How willing would you be to give a **Mexican American** a gift?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

3. How willing would you be to give a **Gay Man** a gift?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

4. How willing would you be to give an **African American** a gift?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

5. How willing would you be to give an **Activist Feminist** a gift?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

Using the scale provided, please read each question and place a mark on the scale that best represents your willingness to engage in the behavior.

Try, if at all possible, not to give the same rating or mark to two or more questions on this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how willing you would be to engage in the behavior, if given the opportunity.

If given the opportunity……
(Place a mark on the scale to answer each question)

1. How willing would you be to praise a **European American**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

2. How willing would you be to praise a **Mexican American**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

3. How willing would you be to praise a **Gay Man**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

4. How willing would you be to praise an **African American**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

5. How willing would you be to praise an **Activist Feminist**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
Not at Willing — Somewhat Willing — Very Much Willing

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents your willingness to engage in the behavior.

Try, if at all possible, not to give the same rating to two or more questions on this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how willing you would be to engage in the behavior, if given the opportunity.

If given the opportunity……
(Place a mark on the scale to answer each question)

1. How willing would you be to admit a **European American** to a selective graduate program?

   1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
   Not at Willing — Somewhat Willing — Very Much Willing

2. How willing would you be to admit a **Mexican American** to a selective graduate program?

   1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
   Not at Willing — Somewhat Willing — Very Much Willing

3. How willing would you be to admit a **Gay Man** to a selective graduate program?

   1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
   Not at Willing — Somewhat Willing — Very Much Willing

4. How willing would you be to admit an **African American** to a selective graduate program?

   1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
   Not at Willing — Somewhat Willing — Very Much Willing

5. How willing would you be to admit an **Activist Feminist** to a selective graduate program?

   1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7
   Not at Willing — Somewhat Willing — Very Much Willing

Appendix F

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents how much you feel a given emotion toward the social group in question.

Try, if at all possible, not to give the same rating or mark to two or more questions on each section of this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how much of the emotion the different groups might give you.
(Place a mark on the scale to answer each question)

1. To what extent do you feel aggravation when thinking about **European Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel aggravation when thinking about **Mexican Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel aggravation when thinking about **African Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel aggravation when thinking about **Activist Feminists?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

- -

(Place a mark on the scale to answer each question)

1. To what extent do you feel agreeable when thinking about **European Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel agreeable when thinking about **Mexican Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel agreeable when thinking about **African Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel agreeable when thinking about **Activist Feminists?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents how much you feel a given emotion toward the social group in question.

Try, if at all possible, not to give the same rating or mark to two or more questions on each section of this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how much of the emotion the different groups might give you.

(Place a mark on the scale to answer each question)

1. To what extent do you feel alarmed when thinking about **European Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel alarmed when thinking about **Mexican Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel alarmed when thinking about **African Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel alarmed when thinking about **Activist Feminists?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

- -

(Place a mark on the scale to answer each question)

1. To what extent do you feel anger when thinking about **European Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel anger when thinking about **Mexican Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel anger when thinking about **African Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel anger when thinking about **Activist Feminists?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents how much you feel a given emotion toward the social group in question.

Try, if at all possible, not to give the same rating or mark to two or more questions on each section of this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how much of the emotion the different groups might give you.

(Place a mark on the scale to answer each question)

1. To what extent do you feel anxious when thinking about **European Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel anxious when thinking about **Mexican Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel anxious when thinking about **African Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel anxious when thinking about **Activist Feminists?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

- -

(Place a mark on the scale to answer each question)

1. To what extent do you feel calm when thinking about **European Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel calm when thinking about **Mexican Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel calm when thinking about **African Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel calm when thinking about **Activist Feminists?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents how much you feel a given emotion toward the social group in question.

Try, if at all possible, not to give the same rating or mark to two or more questions on each section of this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how much of the emotion the different groups might give you.

(Place a mark on the scale to answer each question)

1. To what extent do you feel delight when thinking about **European Americans?**

1 _ _ _2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel delight when thinking about **Mexican Americans?**

1 _ _ _2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel delight when thinking about **African Americans?**

1 _ _ _2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel delight when thinking about **Activist Feminists?**

1 _ _ _2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

- -

(Place a mark on the scale to answer each question)

1. To what extent do you feel frustration when thinking about **European Americans?**

1 _ _ _2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel frustration when thinking about **Mexican Americans?**

1 _ _ _2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel frustration when thinking about **African Americans?**

1 _ _ _2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel frustration when thinking about **Activist Feminists?**

1 _ _ _2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents how much you feel a given emotion toward the social group in question.

Try, if at all possible, not to give the same rating or mark to two or more questions on each section of this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how much of the emotion the different groups might give you.

(Place a mark on the scale to answer each question)

1. To what extent do you feel grateful when thinking about **European Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel grateful when thinking about **Mexican Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel grateful when thinking about **African Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel grateful when thinking about **Activist Feminists?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

- -

(Place a mark on the scale to answer each question)

1. To what extent do you feel irritation when thinking about **European Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel irritation when thinking about **Mexican Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel irritation when thinking about **African Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel irritation when thinking about **Activist Feminists?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents how much you feel a given emotion toward the social group in question.

Try, if at all possible, not to give the same rating or mark to two or more questions on each section of this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how much of the emotion the different groups might give you.

(Place a mark on the scale to answer each question)

1. To what extent do you feel nervous when thinking about **European Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel nervous when thinking about **Mexican Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel nervous when thinking about **African Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel nervous when thinking about **Activist Feminists?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

- -

(Place a mark on the scale to answer each question)

1. To what extent do you feel pleasure when thinking about **European Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel pleasure when thinking about **Mexican Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel pleasure when thinking about **African Americans?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel pleasure when thinking about **Activist Feminists?**
1 _ _ _ 2 _ ____ _ 3 _ __ ___ 4 _ ____ _ 5 _ ____ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents how much you feel a given emotion toward the social group in question.

Try, if at all possible, not to give the same rating or mark to two or more questions on each section of this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how much of the emotion the different groups might give you.

(Place a mark on the scale to answer each question)

1. To what extent do you feel safe when thinking about **European Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel safe when thinking about **Mexican Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel safe when thinking about **African Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel safe when thinking about **Activist Feminists?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

- -

(Place a mark on the scale to answer each question)

1. To what extent do you feel scared when thinking about **European Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel scared when thinking about **Mexican Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel scared when thinking about **African Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel scared when thinking about **Activist Feminists?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

Using the scale provided, please read each question and place a mark somewhere on the scale that best represents how much you feel a given emotion toward the social group in question.

Try, if at all possible, not to give the same rating or mark to two or more questions on each section of this page. If you think hard about each question, and compare each group to all the other groups, you ought to be able to make fine distinctions in exactly how much of the emotion the different groups might give you.

(Place a mark on the scale to answer each question)

1. To what extent do you feel secure when thinking about **European Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel secure when thinking about **Mexican Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel secure when thinking about **African Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel secure when thinking about **Activist Feminists?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

- -

(Place a mark on the scale to answer each question)

1. To what extent do you feel serene when thinking about **European Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you feel serene when thinking about **Mexican Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you feel serene when thinking about **African Americans?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you feel serene when thinking about **Activist Feminists?**

1 _ _ _ 2 _ ___ _ 3 _ __ ___ 4 _ ___ _ 5 _ ___ _ 6 _ _ _ _ 7__ _ _ _ 8 __ _ _ _ 9
Not at all Somewhat Very Much

Appendix G

Directions: Using the given scale, place a mark somewhere on the scale below each statement to answer the following questions:

To what extent do each of the following statements represent your beliefs about **Mexican Americans?**

1. To what extent do you see **Mexican Americans** as a threat to the personal safety of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you see **Mexican Americans** as threatening physical harm to law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you see **Mexican Americans** as posing a threat to the economic resources of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you see **Mexican Americans** as obstacles to the rights and freedoms of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

Directions: Using the given scale, place a mark somewhere on the scale below each statement to answer the following questions:

To what extent do each of the following statements represent your beliefs about **African Americans?**

1. To what extent do you see **African Americans** as a threat to the personal safety of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you see **African Americans** as threatening physical harm to law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you see **African Americans** as posing a threat to the economic resources of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you see **African Americans** as obstacles to the rights and freedoms of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

Directions: Using the given scale, place a mark somewhere on the scale below each statement to answer the following questions:

To what extent do each of the following statements represent your beliefs about **Activist Feminists?**

1. To what extent do you see **Activist Feminists** as a threat to the personal safety of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

2. To what extent do you see **Activist Feminists** as threatening physical harm to law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

3. To what extent do you see **Activist Feminists** as posing a threat to the economic resources of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

4. To what extent do you see **Activist Feminists** as obstacles to the rights and freedoms of law-abiding U.S. citizens?

1 _ _ _ _ 2 _ _ _ _ 3 _ _ _ _ 4 _ _ _ _ 5 _ _ _ _ 6 _ _ _ _ 7_ _ _ _ 8 _ _ _ _ 9
Not at all Somewhat Very Much

Appendix H

Directions: Please indicate for the following behaviors your opinion for how much each behavior is a way of either approaching or rewarding someone.

For each of the following behaviors, place a check mark on **only one** of the lines that best represents your opinion for how much each behavior is a way of either approaching or rewarding someone.

In my opinion, **accepting as one's boss** is …

_____ Very much a way of approaching someone.

_____ Moderately a way of approaching someone.

_____ Slightly a way of approaching someone.

_____ Neither a way of approaching or rewarding someone.

_____ Slightly a way of rewarding someone.

_____ Moderately a way of rewarding someone.

_____ Very much a way of rewarding someone.

In my opinion, **accepting as a work colleague** is …

_____ Very much a way of approaching someone.

_____ Moderately a way of approaching someone.

_____ Slightly a way of approaching someone.

_____ Neither a way of approaching or rewarding someone.

_____ Slightly a way of rewarding someone.

_____ Moderately a way of rewarding someone.

_____ Very much a way of rewarding someone.

In my opinion, **giving a promotion** is …

_____ Very much a way of approaching someone.

_____ Moderately a way of approaching someone.

_____ Slightly a way of approaching someone.

_____ Neither a way of approaching or rewarding someone.

_____ Slightly a way of rewarding someone.

_____ Moderately a way of rewarding someone.

_____ Very much a way of rewarding someone.

In my opinion, **accepting as a neighbor** is …

_____ Very much a way of approaching someone.

_____ Moderately a way of approaching someone.

_____ Slightly a way of approaching someone.

_____ Neither a way of approaching or rewarding someone.

_____ Slightly a way of rewarding someone.

_____ Moderately a way of rewarding someone.

_____ Very much a way of rewarding someone.

In my opinion, **giving a gift** is …

_____ Very much a way of approaching someone.

_____ Moderately a way of approaching someone.

_____ Slightly a way of approaching someone.

_____ Neither a way of approaching or rewarding someone.

_____ Slightly a way of rewarding someone.

_____ Moderately a way of rewarding someone.

_____ Very much a way of rewarding someone.

In my opinion, **having as a casual acquaintance** is …

_____ Very much a way of approaching someone.

_____ Moderately a way of approaching someone.

_____ Slightly a way of approaching someone.

_____ Neither a way of approaching or rewarding someone.

_____ Slightly a way of rewarding someone.

_____ Moderately a way of rewarding someone.

_____ Very much a way of rewarding someone.

In my opinion, **praising** is …

_____ Very much a way of approaching someone.

_____ Moderately a way of approaching someone.

_____ Slightly a way of approaching someone.

_____ Neither a way of approaching or rewarding someone.

_____ Slightly a way of rewarding someone.

_____ Moderately a way of rewarding someone.

_____ Very much a way of rewarding someone.

In my opinion, **admitting to a selective graduate program** is …

_____ Very much a way of approaching someone.

_____ Moderately a way of approaching someone.

_____ Slightly a way of approaching someone.

_____ Neither a way of approaching or rewarding someone.

_____ Slightly a way of rewarding someone.

_____ Moderately a way of rewarding someone.

_____ Very much a way of rewarding someone.

Appendix I

Need For Affect Scale

Directions: Read each of the following statements and decide how much you agree or disagree with each.
It is important for you to realize that there is no "right" or "wrong" answers to these questions.
Please answer the following questions using the following scale:

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

1. If I reflect on my past, I see that I tend to be afraid of feeling emotions. _____
2. I have trouble telling the people close to me that I love them. _____
3. I feel that I need to experience strong emotions regularly. _____
4. Emotions help people get along in life. _____
5. I am a very emotional person. _____
6. I think that it is important for me to explore my feelings. _____
7. I approach situations in which I expect to experience strong emotions. _____
8. I find strong emotions overwhelming and therefore try to avoid them. _____
9. I would prefer not to experience either lows or highs of emotions. _____
10. I do not know how to handle my emotions, so I avoid them. _____
11. Emotions are dangerous --- they tend to get me into situations that I would rather avoid. _____
12. Acting on one's emotions is always a mistake. _____
13. We should indulge our emotions. _____
14. Displays of emotions are embarrassing. _____

Please answer the following questions using the following scale:

-3	-2	-1	0	1	2	3
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

15. Strong emotions are generally beneficial. _____

16. People can function most effectively when they are not experiencing strong emotions. _____

17. The experience of emotions promotes human survival. _____

18. It is important for me to be in touch with my feelings. _____

19. It is important for me to know how others are feeling. _____

20. I like to dwell on my emotions. _____

21. I wish I could feel less emotion. _____

22. Avoiding emotional events helps me sleep better at night. _____

23. I am sometimes afraid of how I might act if I become too emotional. _____

24. I feel like I need to a good cry every now and then. _____

25. I would love to be like "Mr. Spock," who is totally logical and experiences little emotions. _____

26. I like decorating my bedroom with a lot of pictures and posters of things emotionally significant to me. _____

Appendix J

Affect Intensity Measure (AIM)

Directions: The following questions refer to the emotional reactions to typical life-events. Please indicate how YOU react to these events by placing a number from the following scale in the blank space preceding each item. Please base your answers on how YOU react, *not* on how you think others react or how you think a person should react.

NEVER	ALMOST NEVER	OCCASIONALLY	USUALLY	ALMOST ALWAYS	ALWAYS
1	2	3	4	5	6

1. _____When I accomplish something difficult I feel delighted or elated.

2._____When I feel happy it is a strong type of exuberance.

3. _____ I enjoy being with other people very much.

4. _____ I feel pretty bad when I tell a lie.

5. _____When I solve a small personal problem, I feel euphoric.

6. _____My Emotions tend to be more intense than those of most people.

7. _____My happy moods are so strong that I feel like I'm "in heaven".

8. _____ I get overly enthusiastic.

9. _____If I complete a task I thought was impossible, I am ecstatic.

10. _____My heart races at the anticipation of some exciting event.

11. _____Sad movies deeply touch me.

12._____When I'm happy it's a feeling of being untroubled and content rather than being zestful and aroused.

13. _____When I talk in front of a group for the first time my voice gets shaky and my heart races.

NEVER	ALMOST NEVER	OCCASIONALLY	USUALLY	ALMOST ALWAYS	ALWAYS
1	2	3	4	5	6

14. _____When something good happens, I am usually much more jubilant than others.

15. _____My friends might say I'm emotional.

16. _____The memories I like the most are of those times when I felt content and peaceful rather than zestful and enthusiastic.

17. _____The sight of someone who is hurt badly affects me strongly.

18. _____When I'm feeling well it's easy for me to go from being in a good mood to being really joyful.

19. _____"Calm and Cool" could easily describe me.

20. _____When I'm happy I feel like I'm bursting with joy.

21. _____Seeing a picture of someone in a violent car accident in a newspaper makes me feel sick to my stomach.

22._____When I'm happy I feel very energetic.

23. _____When I receive an award I become overjoyed.

24. _____When I succeed at something, my reaction is calm contentment.

25. _____When I do something wrong I have strong feelings of shame and guilt.

26. _____I can remain calm even on the most trying days.

27. _____When things are going good I feel "on top of the world".

28. _____When I get angry it's easy for me to still be rational and not overreact.

29. _____When I know I have done something very well, I feel relaxed and content rather than excited and elated.

30. _____When I do feel anxiety it is normally very strong.

NEVER	ALMOST NEVER	OCCASIONALLY	USUALLY	ALMOST ALWAYS	ALWAYS
1	2	3	4	5	6

31. _____My negative moods are mild in intensity.

32._____When I am excited over something I want to share my feelings with everyone.

33. _____ When I feel happiness, it is a quiet type of contentment.

34. _____ My friends would probably say I'm a tense or "high-strung" person.

35. _____When I'm happy I bubble over with energy.

36. _____When I feel guilty, this emotion is quite strong.

37. _____I would characterize my happy moods as closer to contentment than to joy.

38. _____When someone compliments me, I get so happy I could "burst".

39. _____When I get nervous I get shaky all over.

40. _____When I am happy the feeling is more like contentment and inner calm than one of exhilaration and excitement.

Appendix K

Social Desirability Scale

Directions: Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you.

T	**F**	1.	Before I vote, I thoroughly investigate the qualifications of all of the candidates.
T	**F**	2.	I never hesitate to go out of my way to help someone in trouble.
T	**F**	3.	It is sometimes hard for me to go on with my work if I am not encouraged.
T	**F**	4.	I have never intensely disliked anyone.
T	**F**	5.	On occasion, I have had doubts about my ability to succeed in life.
T	**F**	6.	I sometimes feel resentful when I don't get my way.
T	**F**	7.	I am always careful about my manner of dress.
T	**F**	8.	My table manners at home are as good as when I eat out in a restaurant.
T	**F**	9.	If I could get into a movie without paying and be sure I was not seen, I would probably do it.
T	**F**	10.	On a few occasions, I have given up doing something because I thought too little of my ability.
T	**F**	11.	I like to gossip at times.
T	**F**	12.	There have been times when I felt like rebelling against people in authority even though I knew they were right.
T	**F**	13.	No matter who I'm talking to, I'm always a good listener.
T	**F**	14.	I can remember "playing sick" to get out of something.
T	**F**	15.	There have been occasions when I took advantage of someone.
T	**F**	16.	I'm always willing to admit it when I make a mistake.
T	**F**	17.	I always try to practice what I preach.

T **F** 18. I don't find it particularly difficult to get along with loudmouthed, obnoxious people.

T **F** 19. I sometimes try to get even rather than forgive and forget.

T **F** 20. When I don't know something, I don't mind admitting it.

T **F** 21. I am always courteous, even to people who are disagreeable.

T **F** 22. At times I have really insisted on having things done my own way.

T **F** 23. There have been occasions when I felt like smashing things.

T **F** 24. I would never think of letting someone else be punished for my wrongdoings.

T **F** 25. I never resent being asked to return a favor.

T **F** 26. I have never been irked when people express ideas very different from my own.

T **F** 27. I never make a long trip without checking the safety of my car.

T **F** 28. There have been times when I was quite jealous of the good fortune of others.

T **F** 29. I have almost never felt the urge to tell someone off.

T **F** 30. I am sometimes irritated by people who ask favors of me.

T **F** 31. I have never felt that I was punished without cause.

T **F** 32. I sometimes think when people have a misfortune, they only got what they deserved.

T **F** 33. I have never deliberately said something that hurt someone's feelings.

Appendix L

Using the scale provided, please read each question and circle a number on the scale that best represents your willingness to engage in the behavior. There are no "right" or "wrong" answers.

If given the opportunity……

(circle your response for each question)

1. How willing would you be to **accept an African American as one's boss**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7

Not at Willing — Somewhat Willing — Very Much Willing

2. How willing would you be to **accept an African American as a work colleague**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7

Not at Willing — Somewhat Willing — Very Much Willing

3. How willing would you be to **give an African American a promotion**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7

Not at Willing — Somewhat Willing — Very Much Willing

4. How willing would you be to **accept an African American as a neighbor**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7

Not at Willing — Somewhat Willing — Very Much Willing

5. How willing would you be to **give an African American a gift**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7

Not at Willing — Somewhat Willing — Very Much Willing

6. How willing would you be to **have an African American as a casual acquaintance**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7

Not at Willing — Somewhat Willing — Very Much Willing

7. How willing would you be to **praise an African American**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7

Not at Willing — Somewhat Willing — Very Much Willing

8. How willing would you be to **admit an African American to a selective graduate program**?

1 _ _ _ _ _ _ 2 _ _ _ _ _ _ 3 _ _ _ _ _ _ 4 _ _ _ _ _ _ 5 _ _ _ _ _ _ 6 _ _ _ _ _ _ 7

Not at Willing — Somewhat Willing — Very Much Willing

Using the scale provided, please read each question and circle a number on the scale that best represents your willingness to engage in the behavior. There are no "right" or "wrong" answers.

If given the opportunity……

(circle your response for each question)

1. How willing would you be to **accept an Activist Feminist as one's boss**?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

2. How willing would you be to **accept an Activist Feminist as a work colleague**?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

3. How willing would you be to **give an Activist Feminist a promotion**?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

4. How willing would you be to **accept an Activist Feminist as a neighbor**?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

5. How willing would you be to **give an Activist Feminist a gift**?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

6. How willing would you be to **have an Activist Feminist as a casual acquaintance**?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

7. How willing would you be to **praise an Activist Feminist**?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

8. How willing would you be to **admit an Activist Feminist to a selective graduate program**?

1	2	3	4	5	6	7
Not at Willing			Somewhat Willing			Very Much Willing

Using the scale provided, please read each question and circle a number on the scale that best represents your willingness to engage in the behavior. There are no "right" or "wrong" answers.

If given the opportunity……

(circle your response for each question)

1. How willing would you be to **accept a Mexican American as one's boss**?

1	2	3	4	5	6	7
Not at Willing		Somewhat Willing				Very Much Willing

2. How willing would you be to **accept a Mexican American as a work colleague**?

1	2	3	4	5	6	7
Not at Willing		Somewhat Willing				Very Much Willing

3. How willing would you be to **give a Mexican American a promotion**?

1	2	3	4	5	6	7
Not at Willing		Somewhat Willing				Very Much Willing

4. How willing would you be to **accept a Mexican American as a neighbor**?

1	2	3	4	5	6	7
Not at Willing		Somewhat Willing				Very Much Willing

5. How willing would you be to **give a Mexican American a gift**?

1	2	3	4	5	6	7
Not at Willing		Somewhat Willing				Very Much Willing

6. How willing would you be to **have a Mexican American as a casual acquaintance**?

1	2	3	4	5	6	7
Not at Willing		Somewhat Willing				Very Much Willing

7. How willing would you be to **praise a Mexican American**?

1	2	3	4	5	6	7
Not at Willing		Somewhat Willing				Very Much Willing

8. How willing would you be to **admit a Mexican American to a selective graduate program**?

1	2	3	4	5	6	7
Not at Willing		Somewhat Willing				Very Much Willing

Appendix M

Directions: Using the given scale, write a rating in the blank next to each emotion to answer the question below:

To what extent do you feel each of the following emotions when thinking about **African Americans**?

1 _ _ __ _ 2 _ _ ___ _ 3 _ __ _ __ 4 _ _ ___ _ 5 _ _ _ _ _ 6 _ _ _ _ 7__ _ _ _ 8 _ _ _ _ _ _ 9
Not at all much — Somewhat — Very Much

_____ Aggravation

_____ Agreeable

_____ Alarmed

_____ Anger

_____ Anxious

_____ Calm

_____ Delight

_____ Frustration

_____ Grateful

_____ Irritation

_____ Nervous

_____ Pleasure

_____ Safe

_____ Scared

_____ Secure

_____ Serene

Directions: Using the given scale, write a rating in the blank next to each emotion to answer the question below:

To what extent do you feel each of the following emotions when thinking about **Activist Feminists**?

1 _ _ __ _ 2 _ _ ___ _ 3 _ __ _ __ 4 _ _ ___ _ 5 _ _ _ _ _ 6 _ _ _ _ 7__ _ _ _ 8 _ _ _ _ _ _ 9
Not at all much — Somewhat — Very Much

_____ Aggravation

_____ Agreeable

_____ Alarmed

_____ Anger

_____ Anxious

_____ Calm

_____ Delight

_____ Frustration

_____ Grateful

_____ Irritation

_____ Nervous

_____ Pleasure

_____ Safe

_____ Scared

_____ Secure

_____ Serene

Directions: Using the given scale, write a rating in the blank next to each emotion to answer the question below:

To what extent do you feel each of the following emotions when thinking about **Mexican Americans**?

1 _ _ ___ 2 _ _ ___ _ 3 _ __ _ __ 4 _ _ ___ _ 5 _ _ _ _ _ 6 _ _ _ _ 7__ _ _ _ 8 _ _ _ _ _ _ 9
Not at all much — Somewhat — Very Much

_____ Aggravation

_____ Agreeable

_____ Alarmed

_____ Anger

_____ Anxious

_____ Calm

_____ Delight

_____ Frustration

_____ Grateful

_____ Irritation

_____ Nervous

_____ Pleasure

_____ Safe

_____ Scared

_____ Secure

_____ Serene

VITA

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ABSTRACT

FIGHT OR FLIGHT: THE FUNCTIONAL SPECIFICITY OF EMOTIONS AND RESULTING EFFECTS ON ATTITUDE-BEHAVIOR CONSISTENCY

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Past research on the emotions associated with attitudes has investigated the extent to which specific types of emotions lead to actions (Seitz, Lord & Taylor, 2007). The present research extends this past research by showing that emotions engender a functional specificity with consequences for attitude-behavior consistency. In addition, the present research extends Attitude Representation Theory (Lord & Lepper, 1999) by showing that some emotions included in the attitude object's representation may involve specific action tendencies (reward/punish; approach/avoid) that result in consequences for attitude-behavior consistency. Experiment 1 employed an emotion manipulation. Participants were primed to associate either the emotion fear or the emotion anger with their attitudes. Experiment 2 borrowed from the literature on prejudice (Cottrell & Neuberg, 2005), using social groups known to elicit specific emotions (African Americans: Fear, Activist Feminists: Anger). The central hypothesis--that specific emotions associated with an attitude target can elicit specific behaviors and in turn result in better attitude-behavior consistency--was partially supported. In Experiment 1, participants primed to associate fear with Mexican Americans later reported relatively high levels of fear and concerns about personal safety, as well as relatively high levels of attitude-behavior consistency on approach-avoidance measures. Those primed to associate anger with Mexican Americans did not do so, but they did display relatively high levels of attitude-behavior consistency on reward-punish measures. Experiment 2 replicated earlier findings that people associate more fear and

safety concerns with African Americans, but more anger and threats to their rights with Activist Feminists. They also displayed marginally higher attitude-behavior consistency with Activist Feminists than African Americans on reward-punish than approach-avoidance measures, although the attitude-behavior consistency results were not supported for behaviors toward African Americans.