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Cover Page Footnote

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Diego Gomez

Major:
Psychology

Mentor:
Dr. Richard Petty
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The Effects of Anger and
Happiness on Opposite Valence
Racial Stereotypes

Biography

Diego Gomez is an immigrant from Jalisco, Mexico. He moved to the United States when he was five years old. In having to adapt to a different culture, and living the majority of his life in poverty, Diego became academically inclined to improve the life of his family. Through his motivation and persistence, he will become the first in his family to obtain a Bachelor's degree when he graduates this May. His pursuit of a higher education will not stop there, however, as he was recently accepted into a one-year research internship for Dr. Greg Walton's lab at Stanford University. In this lab, Diego conducts research on identifying effective ways to communicate with students placed on the academic probation/warning process to improve their academic outcomes. Diego will be applying to a Ph.D Program in Social Psychology this Fall, where he plans on getting the necessary skills to achieve his life-long academic goal of becoming a professor and researcher at a University.

The Effects of Anger and Happiness on Opposite Valence Racial Stereotypes

Abstract

This research examines angry and happy (versus neutral) emotions and how they affect ethnic stereotyping. Research has found that both anger and happiness increase a person's reliance on stereotype information versus neutral emotion when making social judgments. Research has also found that ethnic stereotypes are not exclusively negative, as some stereotypes make positive generalizations of certain groups. However, research on ethnic stereotypes has exclusively been presented in a negative and not a positive context. Furthermore, past studies have only focused on negatively stereotyped racial groups (e.g., Hispanics) and not positively stereotyped racial groups (e.g., Asians). This research concentrates on both positively and negatively stereotyped groups, in both a negative and a positive context, with positive and negative emotions. This experiment explores Hispanic stereotypes in both a negative and positive context for participants who were induced to be either angry, happy, or neutral. Furthermore, we included an Asian ethnic condition, which is stereotype-inconsistent from the aggressive trait associated with Hispanics. Implications about the effects and limitations that anger and happiness have on increasing stereotyping versus neutrality are also discussed.

Keywords: emotions, stereotypes, judgments, anger, happiness.

Literature Review

Over the course of the past three decades, there has been an extensive amount of research on the effects moods have on social judgments and stereotyping. Initially, research indicated that judgments followed the valence (i.e., positive or negative connotation) of the mood (Schwarz & Clore, 1983). These findings brought forth the theoretical approach of the mood congruency effect, which assumes that individuals make judgments biased in the valence of the prevalent mood (e.g., Bower, 1991). This valence-based approach divided mood into two broad categories: negative and positive (Lerner, Li, Valdesolo, & Kassam, 2015). Therefore, in the instance of a positive mood, the mood congruency effect predicts that the judgment that proceeds the positive mood will also

be positive (Loewenstein & Lerner, 2003). However, later research on emotions and decision-making found that this theoretical approach has limitations.

The major limitation of the mood congruency effect is that it predicts all emotions will influence the judgment in accordance to the valence of that emotion. In this theory, both anger and sadness would be expected to elicit negative judgments because they both have a negative valence. However, it is important to understand that there is a clear distinction between moods and emotions and that the effects they have on social judgments and stereotyping differ.

In social, personality, and cognitive psychology, moods and emotions have been researched extensively, acknowledging that their basis and implications differ. While mood refers to more general effects of how the individual feels that persist in duration and its antecedents are not clear to the individual experiencing the mood, emotions refer to more focused affective states that arise from actual situations in the world and are short-lived as well as biologically mediated reactions to perceived survival events (Bodenhausen, Sheppard, & Kramer, 1994; Forgas, 2013; Lerner, Li, Valdesolo, & Kassam, 2015). The contrast between these two forms of effects is essential to understanding why emotions of the same valence have been found in research to have different effects on a person's cognition and motivation.

Research focused on comparing the emotion of both anger and negative mood has found that they have different effects on individuals (DeSteno, Dasgupta, Bartlett, & Caidric, 2004). In the comparison between anger (emotion) and negative mood (valence), anger has been found to increase stereotyping and prejudice toward outgroups while negative mood has not shown this effect. Negative mood has also been found to enhance motivation and memory performance, lower erroneous judgment reliance, and improve interpersonal strategies (Forgas, 2013). The difference found in research between anger and negative mood furthers the implication that these forms of effect differ, despite both having a negative valence.

While negative mood may improve systematic processing, research on positive mood has found different effects. Specifically, positive mood has been found to increase reliance on early information (i.e., primacy

effect) in evaluative judgments (Forgas, 2011b). Also, positive mood increases the utilization of erroneous memories in eyewitness recollection (i.e., false alarms; Forgas, Vargas, & Laham, 2005). Both primacy effects and false alarms can lead to negative judgments when the individual is making a decision about a situation or target. These findings not only contradict the mood congruency effect—in that they indicate opposite effects of what the valence-based approach predicts—but they also contradict the notion that all emotions with a negative valence (in this case, anger) will lead to negative judgments about a target.

Although once predicted to have the same effects on decisions, emotions with a negative valence such as anger, anxiety, and sadness have been shown to have different effects on social judgments and other forms of cognitive processing (Lerner, Li, Valdesolo, & Kassam, 2015). For example, anger and sadness have been found to differ in their effects on perceivers' heuristic cue reliance when making social judgments (e.g., for anger and sadness: Bodenhausen, 1993; Bodenhausen, Sheppard, & Kramer, 1994b; for sadness: Krauth-Gruber & Ric, 2000). Specifically, anger has been found to increase reliance on stereotypes and sadness has been found to decrease reliance on stereotypes. In other words, with stereotypes being heuristics, these findings imply that anger increases heuristic processing in social decisions, while sadness decreases this effect. Anxiety, also having a negative valence, has been found to have inconsistent effects on stereotype evaluations. Past research has theorized that anxiety increases stereotype use because it burdens the individual with a cognitive load (Darke, 1988), making the reliance of stereotyping a matter of saving cognitive-processing resources (Macrae, Milne, & Bodenhausen, 1994; Wilder, 1993). However, a recent study indicated that although anxiety may cause a cognitive burden, people may direct their cognitive resources to information-processing in an effort to produce an accurate evaluation rather than relying on stereotypes to form their judgments (Curtis, 2013). Therefore, anger, sadness, and anxiety have different effects on stereotyping, even though they have negative valence. The variance in emotions with a negative valence, such as the ones mentioned, indicate that specific emotions affect cognitive, heuristic and systematic processing in different ways.

Of particular interest in the effects emotions have on decision-making is that happiness (positive valence) has been found to increase the reliance on stereotypes in evaluations (Bodenhausen, Kramer, & Süsser, 1994; Krauth-Gruber & Ric, 2000; Curtis, 2013; Park & Banaji, 2000). While anger, sadness, or anxiety have contrasting effects on stereotype reliance, anger and happiness have similar effects on cognition, despite having the opposite valence (i.e., happiness has a positive valence and anger has a negative valence). Research on anger and happiness has shown that these discrete emotions are “high certainty” emotions (Tiedens & Linton, 2001) that increase reliance on heuristic cues for judgment and decision making. Similarly, research has shown that anger and happiness could make individuals feel more certain in their appraisal of a situation (Ellsworth & Smith, 1988), which leads to individuals having more confidence in their thoughts (also called cognitive validation; Petty, Briñol, Tormala, & Wegener, 2007).

Despite their similarities, anger and happiness have also been shown to have key differences in the way they affect cognitive processes. For instance, Bodenhausen, Sheppard, & Kramer, (1994) attributed the increased use of heuristic information by angry individuals to the more complicated physiological responses (e.g., increased heart rate, epinephrine secretion and blood pressure) it produces. They also attributed the decreased use of systematic processing in anger to increased impulsive behavior that is associated with the perception of an immediate threat, which may lead to difficulty concentrating in certain ambiguous situations. This limitation in focus, therefore, leads people to rely on heuristic processing when making decisions and judgments (Lerner, Li, Valdesolo, & Kassam, 2015).

Happiness, on the other hand, decreases a person’s information and systematic processing capabilities when making judgments because it affects people’s motivation to think carefully about individuating information (Bodenhausen, Kramer, & Süsser, 1994; Curtis, 2013). Instead of thinking about all the factors that may be present at any given point in time, happy people rely on categorical information (e.g., stereotypes) when evaluating specific targets and situations. Happiness also leads to a liking of one’s own thoughts (affective validation), potentially increasing the reliance on mental contents that validate their

thoughts at the time of feeling happy (Petty et al., 2007). These root causes and effects differ from that of anger, as anger does increase a person's confidence in their own thinking (cognitive validation), but does not increase one's liking of their own thoughts (affective validation); happiness, on the other hand, increases both (Petty, & Briñol, 2015). Thus far, in the literature, happiness and anger have been studied under identical conditions. For example, Bodenhausen, Kramer, & Süsser, (1994) conducted four experiments that attempted to decipher the most prominent influence in happiness' effect on increasing stereotype judgments. Emotions were induced by telling participants to recall happy experiences they previously had. They were then told to read a study on "legal socialization," which was based on a disciplinary case against an individual suspected of an assault or cheating crime (i.e., cheating on a standardized exam).

In the neutral condition of the assault case, the suspect was named "John Garner"; in the stereotype condition, the suspect was named "Juan Garcia." In the cheating case, the suspect was described as "a well-known athlete." In the assault case, the suspect was given the name "Juan Garcia," a name of Hispanic origin, to address the stereotype associated with Hispanic males as being aggressive and violent. Furthermore, both the assault and cheating cases were ambiguous, with half of the information implying guilt and the other half implying innocence. The ambiguity of the guilty verdict excluded the confounding variable of case information (i.e., the assault case), influencing participants' decisions on the suspect's guilty verdict.

Happy participants not motivated to process systematically judged the Hispanic-named suspect (stereotyped condition) significantly guiltier than the control-condition name. In all of the experiments, when the case information was ambiguous and there were no moderators present (in one experiment, the moderator factor "accountability," motivated happy participants to avoid stereotyping), happy participants stereotyped more so than neutral participants. These effects were replicated with gender (Curtis, 2013, experiment 3), skinheads, and young priests (Krauth-Gruber & Ric, 2000, ambiguous condition).

The same study design as Bodenhausen, Kramer, & Süsser (1994) was utilized for the emotions of anger and sadness (Bodenhausen,

Sheppard, & Kramer, 1994), with researchers conducting three experiments, the first being identical to that of Bodenhausen, Kramer, et al. (1994). Like happiness, anger significantly increased stereotyped judgments when compared to neutral and even sad participants. Specifically, Bodenhausen, Sheppard, et al. (1994) found that anger increased stereotyping and sadness decreased stereotyping when participants made judgments about groups that are stereotyped to commit an assault crime (i.e., Hispanics) or a cheating crime (i.e., athletes). As previously mentioned, even though anger and sadness have a negative valence, the findings of this study indicate that they have opposite effects in the way they influence decision-making under the ambiguous situation of a disciplinary hearing (Bodenhausen, 1990, Experiment 2). Also, findings indicate that happy and angry individuals—when making social judgments and processing social categories—rely on heuristic cues more so than sad individuals. Both studies give theoretical validity to the commonalities found in research between anger and happiness.

Current Study

Despite having similar findings under identical conditions, anger and happiness have not been analyzed in different contexts. In the case of Bodenhausen, Sheppard, & Kramer (1994) and Bodenhausen, Kramer, & Süsser (1994), the stereotypes were of negatively perceived ethnic group members in a negative context (i.e., a Hispanic individual committing an aggressive crime). However, there has yet to be a study in which a positively stereotyped ethnic group member is judged in a positive context (e.g., an Asian-American receiving an academic award based on the stereotyped trait of higher intelligence).

Past research has used positive ethnic stereotypes such as those associated with Asian-Americans (e.g., Forgas & Moylan, 1991; Esses, & Zanna, 1995), but were only based on general perceptions of the group as opposed to judgments of them in a stereotype-consistent yet ambiguous case description, similar to the cases of Bodenhausen and colleagues (1994). Krauth-Gruber & Ric (2000) did use a positively stereotyped group (young priests), but they were not described in a positive context (stereotype-consistent) that would have matched the positive valence of the stereotype; they were described in the context of committing a violent

act (stereotype-inconsistent). In another study, Bless, Schwarz, & Wieland (1996) used a positively stereotyped group (Greenpeace representative) in a positive and stereotype-consistent context (e.g., Greenpeace representatives as being environmentally conscious), but the information about the group was not ambiguous. Given that ambiguity in a stereotype-consistent setting is what deciphers the use of stereotypes, it is important, therefore, to test if this method is also applicable to positively stereotyped groups, such as Asian-Americans (Aronson, Lustina, Good, Keough, Steele, & Brown, 1999; Cheryan & Bodenhausen, 2000).

Methods

Participants

We randomly assigned a total of 486 participants in the experiment through Amazon's Mechanical Turk. All participants received a financial incentive for their participation.

Design

Participants were randomly assigned to a condition of 2 (stereotype case: Hispanic-stereotyped positive act vs. Hispanic-stereotyped negative act) \times 3 (ethnicity: Asian vs. Hispanic vs. Control [White]) \times 3 (emotion: happy vs. angry vs. neutral) in this between-participants factorial design. For the Hispanic stereotype positive act, we created a vignette that described an individual saving a life by aggressive means (i.e., fighting the perpetrator). In the negative version, we described an assault crime. We also altered the individual's ethnicity in the vignette by changing their name for each of the cases. The rest of the case information remained identical in the different conditions.

Materials

We prompted participants to complete two tasks that we described as unrelated. The first experiment described an emotion and memory task and the second described a disciplinary case (negative outcome) or an award receiving case (positive outcome).

In the first task, we induced emotion states by imitating the procedures described in Bodenhausen, Sheppard, et al., (1994),

Bodenhausen, Kramer, et al., (1994), and Strack, Schwarz, & Gschneidinger (1985). For the angry group, participants were prompted to write about a life event that they interpreted as arousing anger. Specifically, we asked participants to recall an event that caused them to be angry and write about it in detail. Participants were also prompted to be specific and vivid in their recall descriptions and to give details about how they felt at the time of the experience. For participants in the happy condition, we used the same procedures, but rather than asking participants to recall an angry event, we asked them to recall a positive experience that made them happy. In the neutral group we asked participants to recall an everyday normal routine. The recall writing tasks were controlled by time and character count constraints in Qualtrics. This was to ensure that participants engaged in recalling a specific event that induced the appropriate emotion.

In the second task, we asked participants to read a vignette with either a negative or positive outcome. The vignette with a negative outcome described a situation in which a student was a suspect in a disciplinary case that involved aggressiveness while the positive version described a student as a potential recipient of an award for a heroic act that also involved aggressiveness. The act of aggressiveness remained intact for both versions of the vignette to represent the male Hispanic stereotype. In both cases, the details about the story were ambiguous, with an equal amount of evidence in favor of and against the student.

The purpose of the two vignettes was to obtain mean guilt ratings among happy, neutral, or angry participants when making judgments about either a Hispanic, Asian or White student. The stories were either ethnically stereotype-consistent (in the case of the Hispanic student) or stereotype-inconsistent (in the case of the Asian and White student). In each of the cases, the name of the student varied in ethnic connotation to represent each of the three ethnic groups. All other information about the student remained identical between the conditions.

Vignettes

As previously mentioned, the vignette described a stereotype-consistent case that tapped into the ethnic stereotype associated with Hispanic males as being aggressive and violent (Bodenhausen, 1990). One

version of the vignette had a negative outcome while the other version had a positive outcome. The negative case described an assault crime, in which the evaluated student was suspected of committing a crime against another student. The positive case described a scenario in which the evaluated student aggressively attacked a thief who was attempting to commit a robbery. The result of the student attacking the thief ultimately saved a peer's life and led to an award recommendation for the heroic act. In all cases, the information was ambiguous, as in, a portion of the information indicated the student was innocent (disciplinary case) or that the student deserved an award (receiving credit case), while the other portion of the information indicated that the student was guilty or that they should not receive the award. The purpose of having an ambiguous case is to have participants focus on the target's categorical information (i.e., racial ethnicity), so that when making judgments, participants would not rely on case information. This procedure has been found to be effective in isolating categorical information from case information (Krauth-Gruber & Ric, 2000).

The student in question for the Hispanic ethnic condition was "Jose Garcia," emulating the conditions in Bodenhausen, Kramer, et al. (1994). The Asian and White ethnic conditions had names with ethnic connotations respective for each group. Specifically, the student in the Asian ethnic condition was named "Jing Chung" and the student in the White ethnic condition was named "John Garner." The Asian ethnic condition was stereotype-inconsistent; the Hispanic ethnic condition was stereotype-inconsistent; and the White ethnic condition was neither stereotype-consistent nor stereotype-inconsistent (control condition). We randomly assigned each of the different ethnic names to participants.

The main dependent measure was the mean guilt ratings of participants for each of the ethnic conditions. The other dependent measure was the mean rating of a general stereotype assessment that measured beliefs about Hispanics and Asians. This assessment contained items such as, "Of 100 random people of Hispanic descent living in the U.S., how many are convicted of committing a violent crime in a year?" These items were used interchangeably (i.e., asking the same question about committing a violent crime) for Asians and Whites in order to

determine significant differences (if any) in their beliefs about each of the ethnic groups.

Conclusion

This pilot study will specifically gather more data to accurately complete this research. The sample of surveys will be double in size. In total, we are expecting to have over 900 participants, all of which will be from Amazon's MTurk. We will collect this data over a three-month period in the summer of 2017.

In the process of gathering more data, we intend to look at how participants' gender, ethnicity, political party, age, and other demographic information will affect their responses to each of the conditions. As an example, we are attempting to answer the question: "Will a specific sample of participants from the same ethnic background, on average, judge the Hispanic-named student as more likely to have committed the crime?" Questions of this nature apply to all other demographic information, as we are attempting to identify specific judgmental patterns from participants.

In addition to identifying judgmental patterns based on demographics, we intend to compare and contrast our results in the negative Hispanic stereotype-consistent case to those of Bodenhausen, Kramer, & Süsler (1994) because the study designs are essentially identical. In comparing results, we will be able to determine if there have been any changes in opinion toward Hispanic males in the past twenty years. This is of particular interest, given the current political climate and how it may have affected public beliefs about negatively stereotyped groups. With such a time difference, we are interested in identifying whether public opinion has remained stable (this would mean that negative stereotypes still persist), shifted in a more negative (i.e., has stereotyping toward Hispanic individuals increased) or positive (i.e., has stereotyping toward Hispanic individuals decreased) way.

Future Research

Given we have not collected our data, we are not in a position to recommend future areas of study for researchers in this domain.

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