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EFFECTS OF STEREOTYPE ACTIVATION ON SELF-CONCEPTS: DIFFERENCES
BETWEEN NATIVE AMERICAN AND CAUCASIAN COLLEGE STUDENTS

By

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Effects of Stereotype Activation on Self-Concepts

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Prior research has shown that when individuals are exposed to stereotype activation (SA) mechanisms, such as priming, their subsequent behavior often conforms to stereotypical expectations. Previous studies have focused on measuring stereotype activation primarily with manipulations of task completion after subjects are exposed to a prime. This study intended to expand the current research by exploring the effect of SA on an individual's self-concept. Research was conducted with Native American and Caucasian college students using an ethnicity salient questionnaire as a means of SA. Participants then completed self-report measurements associated with Native American stereotypes. It was hypothesized that priming Native American ethnicity would sway the participants' to report self-concepts that were parallel to Native American stereotypes. It was expected to stimulate change for Native American students, but would have no effect on Caucasian students. Results indicated, however, that the priming manipulation caused stereotype *disconfirmation* in Native American participants, with mixed effects for Caucasian participants.

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Effects of Stereotype Activation on Self-Concepts:

Differences Between Native American and Caucasian College Students

INTRODUCTION

"Most of a person's everyday life is determined not by their conscious intentions and deliberate choices but by mental processes that are put into motion by features of the environment that operate outside of conscious awareness and guidance" (Bargh & Chartrand, 1999, p. 5).

As humans, our tendency to operate socially is often based on unconscious automatic thinking. In other words, humans oftentimes do not employ logic when engaging in appraisal activities. Social psychologists have conducted various research studies demonstrating that individuals who are unknowingly primed with a concept will then unconsciously make changes in their behavior to match the expected behavior related to the primed concept. Priming research has been conducted using concepts such as gender, age, IQ level, socioeconomic status, and ethnicity. The latter concept was the focus of this study. The goal of this paper was three-fold. First, it aimed to extend previous work on ethnicity priming to a new population of participants that has been understudied: Native American participants (Osborne, 2001). The majority of previous research using ethnicity priming has focused primarily on African American and Asian American populations. To date, there are no studies that have investigated the use of a priming mechanism with Native American participants. Second, this paper extended the

effects of an ethnicity prime beyond task performance to investigate implications on self-concepts. And finally, this paper attempted to provide a clarification of exactly why an ethnicity prime works, specifically by measuring both positive and negative stereotypical behaviors at the same time. In order to understand how ethnicity primes might invoke stereotypes and in so doing change group members' self-concepts, we first must understand why stereotypes exist in the first place.

Why Stereotypes Exist: The Origins and Functions of Stereotypes

Where do stereotypes come from? In part, stereotypes are socially learned ideas (Schaller, Conway, & Tanchuk, 2002). Stereotypes represent accepted generalizations about a particular sub-group in a population, which gain strength through social conformity and perceived social endorsement (Sechrist & Stangor, 2001). As a result, stereotypes often serve as quick-and-easy heuristics, and avoiding the tendency to use stereotypes can be difficult. After several exposures to a stereotype they become automatic thoughts, activated with or without conscious approval from the perceiver (Devine, 1989). In order for one to not participate in automatic thinking, *effortful thought* needs to take place (Blass, 1991). Most individuals do not use effortful thought on a consistent basis, thus increasing the likelihood of stereotyping others without even being consciously aware of the occurrence (Gilbert & Hixon, 1991). Because of automatic thinking, individuals may engage in stereotypeing without realizing they are doing so (Nosek, 2005; Uhlmann, Brescoll, & Paluck, 2006).

This tendency to use stereotypes may have an evolutionary underlying purpose that isn't just a reliance on norms: One explanation concerning the functionality of stereotypes is to conserve energy in the brain thus allowing an individual to devote

available energy resources to tasks that may be more important for survival at any given moment (Bargh & Chartrand, 1999). Stereotypes serve as a way to categorize one's environment to allow for easier social maneuvering, thus the conservation of energy. They are an automatic, instantaneous cognitive approach to determine if an encountered individual is from an in-group or an out-group --in other words, to help distinguish "friend" from "foe" (Hugenberg, Bodenhausen, & McLain, 2006). Related to this, stereotypes can also serve to create appropriate behavioral readiness and assist people to follow group expectations. From this perspective, stereotypes promote group cohesion, as well as provide members of society a perception of predictability (Bargh & Chartrand, 1999).

Consequences of Stereotyping

For the reasons cited above, stereotypes are very pervasive, usually automatic responses to social environments. It is perhaps unsurprising, given the instinctive nature in which they are applied, that out-group members (targets) often experience differences in treatment by in-group members (perceivers). This differential treatment may have the ability to alter the self-concept of the out-group member. The in-group member may not consciously recognize this influence on out-group members self-concept, nonetheless it is well-established that stereotypes can impact the behavior and internal thought processes of both parties.

In fact, some famous research demonstrates some surprising consequences of stereotype activation on stereotyped groups. Priming some aspect of the stereotype and then measuring outcome variables is most often how this phenomenon is investigated. We now turn our attention to this work and its implications for the present study.

The Basic Effect of Stereotype Threat and why it works

Stereotype threat occurs when individuals become aware of negative stereotypes related to a group identity, which oftentimes will produce a heightened sense of anxiety for fear of behaving in a way that will validate the stereotype (Steele & Aronson, 1995). One of the ironic consequences of this is that such stereotype threat often causes group members to behave in more stereotypical ways. In Steele & Aronson's (1995) classic study on stereotype threat, African American participants who were reminded of negative stereotypes about their ethnic group scored lower on a standardized academic test then did African American participants who did not receive a stereotype cue.

Other research has shown that particular factors, such as mono-racial vs. bi-racial identity, which has been shown to influence the impact of stereotype threat. Research conducted by Shih, Bonam, Sanchez, and Peck (2007) found that bi-racial individuals are less susceptible to stereotype threat than are mono-racial individuals. In addition, other research suggests that an individual's level of ethnic identity can also be a contributing factor to the susceptibility of stereotype threat (Cohen & Garcia, 2005; Schmader, 2002). If an individual is less identified with a particular social group, he or she is less likely to be affected by the stereotypes associated with that group, compared to someone who is more identified with the group. Additional studies have also suggested that an individual's level of self-monitoring can influence the effect of stereotype threat. Low self-monitors are more susceptible to the threat than high self-monitors (Spangenberg & Sprott, 2006). High self-monitors tend to react to stereotype threat with an increase in

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performance, rather than a decrease (Inzlicht, Aronson, Good, & McKay, 2006).

Personality traits have also been shown to moderate the effect of stereotype threat.

Specifically, "(a) targets who are easier to influence (more submissive, acquiescent,

social evaluation oriented) and (b) targets with greater ability to decode nonverbal

communication…show greater susceptibility to expectancies communicated by others"

(Cooper & Hazelrigg, 1998, p.938).

Task Interference, Interpersonal Expectancy Effect & Self-Fulfilling Prophecy Effect

Why does stereotype threat interfere with task performance? There are two very

different conceptual reasons why ethnicity primes might have an effect on stereotyped

groups; Interpersonal Expectancy Effect, & Self-fulfilling Prophecy Effect. These

constructs combined may explain why individuals from stigmatized groups internalize

stereotypes and can experience changes in their performance of tasks. Let's take each of

these in turn, beginning first with task interference.

Task interference. It has been hypothesized that stereotype threat can impede

performance by increasing anxiety, which then reduces cognitive energy available to

allocate to an individual's performance of a task (Steele & Aronson, 1995). Specifically,

working memory is reduced in stressful situations because stress consumes cognitive

resources (Schmader & Johns, 2003). Rather than having the ability to dedicate all of

one's cognitive energy to a task, the individual is conflicted and divides the energy

between performing the task and simultaneously conducting a self-assessment to

determine if a stereotype is accurate or not. Due to cognitive multi-tasking an

individual's speed and accuracy in performing a task is ultimately reduced (Steele &

Aronson, 1995; Steele & Ambady, 2006).

Interpersonal expectancy effect. Interpersonal expectancy effect (IEE) occurs when an in-group member's behavior elicits conformity in a out-group member's behavior (Cooper & Hazelrigg, 1988). In light of this definition, it may be concluded that the out-group member is behaving in (what in-group members believe to be) a socially acceptable manner. This is true even if the resulting behavior is considered to be socially undesirable. However, IEE alone is not enough to fully account for how stereotypes are internalized by out-group members. IEE works in collaboration with another construct, self-fulfilling prophecy effect.

Self-Fulfilling Prophecy. Self-fulfilling prophecy effect (SPE) occurs when a in-group member's stereotypic beliefs influence an out-group member to act in accordance to the biased expectations of the out-group member. This could have a clear application to group-relevant behavior. A person may treat an in-group member more favorably than an out-group member. Specifically, the out-group member may exhibit subtle unfriendly characteristics towards an out-group member, such as a decrease in warmth, differences in facial expression and tone of voice (Sue, Capodilupo, Torino, Bucceri, Holder, & Nadal, 2007). This difference in interaction leads the target to experience a state of cognitive dissonance which then influences the target to adjust their behavior in order to conform with the biased expectation of the perceiver (Madon, Guyll, & Spoth, 2004). To simplify this dynamic, if the perceiver has a belief about a particular group based on a stereotype, the manipulated behavior then reinforces the inaccurate belief. The effect of these two constructs is more powerful if there are several individuals with the same biased belief about a person from a different group. In this sense, the stereotype functions as a social expectation, which can serve as a powerful tool to promote

conformity in the out-group member, thus leading to SPE (Sprott, Spangenberg, & Fisher, 2003). "… [E]ven if the basis for a [stereotype] is initially inaccurate, if the [stereotype] is self-fulfilling, [in-group members] can then point to the 'evidence' as 'support' for their stigmatizing beliefs. Theoretically, therefore, initially inaccurate beliefs may be maintained indefinitely" (Jussim, Palumbo, Chatman, Mado, & Smith, 2000, p.378).

The social impact of this mechanism is best described by Jussim et al. (2000), suggesting that "self-fulfilling prophecies contribute to the maintenance of social stigmas and the inferior status of stigmatized individuals"(p. 374). Together, these two mechanisms push people to behave in accordance with stereotyped expectations.

The individual impact on an out-group member may become an endless cycle. Over time, the out-group member is bombarded with interpersonal expectancy effects that eventually become internalized, which then changes the stereotypical expectation into a self-fulfilling prophecy. What is not apparent from the literature is if the cycle affects the individual's underlying self-concept. In all, this experience can have significant impact on a stigmatized person's level of achievement, both in the attainment of personal goals and overall mental and emotional well-being.

It is clear that the two mechanisms, IEE and SPE, are related. Each describes the same dyadic process from a different point of view, one of the in-group member (IEE) and one of the out-group member (SPE). For convenience, throughout the rest of this paper, this mechanism is referred to as the self-fulfilling prophecy effect (SPE); in doing so, there is an assumption that IEE and SPE are in fact two sides of the same coin.

Does this well-established mechanism explain the effects of ethnicity primes?
Some preliminary, although indirect, evidence exists for SPE with respect to
stereotypes/ethnicity primes. Researchers found that when stereotypes were made salient
to a member of a stereotyped group the participant's behavior changed to match the
expectation of the stereotype, even if the stereotype was positive (Shih, Pittinsky, &
Ambady, 1999; Shih, Pittinsky, & Trahan, 2006). The first study focused on Asian
American undergraduate females. Researchers randomly assigned participants to one of
three groups: an Asian prime, a female prime and a control. They then measured
participant's performance on a quantitative skill assessment.

Researchers hypothesized that when a group stereotype related to math success
(Asian) was made salient, participants would score better on a math test, but when a
group stereotype related to math skill deficiency (female) was made salient participants
would score lowest. The outcome of the study supported the hypothesis. The Asian
salient group scored the highest, the female salient group scored the lowest and the
control group's scores fell in the middle. This study suggests that when a stereotype is
made salient it can affect how an individual behaves, even to the point of affecting
cognitive performance, regardless of the actual skill level of the participant. This
research supports the notion that people may behave in accordance with expectations
based on stereotypic beliefs. The Shih et al. (1999, 2006) research suggests that members
of a stereotyped group may not just be distracted by stereotype threat: They may also be
internalizing the stereotype that they encounter, thus influencing their behavior.

The suggestion of internalized stereotypes is what the following research design
intended to investigate, using a population of Native American and Caucasian subjects.

In doing so, I hope to better separate the effects of ethnicity priming on task performance from the effects on an individual's self-concept. In order to understand how stereotypes might influence the behaviors of Native Americans, it is important to first understand the nature of the Native American stereotype.

The Native American Stereotype

The majority of people in the United States have never interacted with a person of Native American ancestry. The bulk of knowledge people have about this particular ethnic group comes from the educational system and popular media. Unfortunately, these two methods of knowledge acquisition tend to range from romanticized to savage. More specifically, views of Native people vary from completely inaccurate to a hyper-focus on social ills. This promotes a generalist view and ultimately leads to increased stereotyping of Native Americans.

The most common stereotype is that Native Americans are alcoholics and behave violently (Duran & Duran, 1995; Fleming, 2006; Holmes & Antell, 2001; Mihesuah, 1996; Nebelkopf & Phillips, 2004; Quintero, 2001). Other stereotypes that exist about Native Americans are that they are dirty and dumb (Sky-McIIvain, 1993), lazy (Freng, 2002; Sky-McIIvain, 1993), they steal (Urmston, 1983), they are physically aggressive (Perry, 2006), and do not value time management (Freng, 2002; Sky-McIIvain, 1993). According to Mihesuah (1996), "For the victims, false imagery most notably causes emotional distress: anger, frustration, insecurity, and feelings of helplessness…Negative stereotypes of Indians encourage[s] discrimination at work, in the marketplace, and in social settings" (pg. 113). If, in fact, stereotypes are internalized, Native Americans are in danger of experiencing a social environment that facilitates an endless cycle of IEE

and SPE. It is also worth noting that not all stereotypes of Native Americans are negative; for example, they are viewed as "tradition loving" (Schaller et al., 2002), a trait that is considered more positive than negative.

Based on the stereotypes mentioned in the literature, the design will look at the following dependant variables: drinking motives, collectivism, perceived cognitive failures, and general self-esteem. The instruments used to measure these constructs are described in the method section.

<div align="center">METHOD</div>

Design Overview and Hypothesis

This study tested whether stereotypes associated with an ethnic minority group can be internalized, thus manipulating an individual's self-concept In particular, this study tested if an individual's concept of self could be manipulated by using a Native American ethnicity priming mechanism as a form of stereotype activation.

It was theorized that Native American participants assigned to an ethnicity primed group would show mean differences in measures of internal beliefs of the self compared to Native American participants assigned to a control group. More specifically, the group means from the experimental group would show significant difference from the control group means on each of the variables measured, thus indicating that Native American individuals exposed to an ethnicity prime show effects of stereotype activation, indicating a manipulation of the individual's view of self. In contrast, the effect of the Native American ethnicity prime would not manipulate the scores of Caucasian participants (experimental and control). Thus, an interaction between ethnicity prime (absent, present) and ethnicity (Native American, Caucasian) was expected.

In order to test this theory, the design included five independent hypotheses, identified as the five dependent variables being measured, which were self-esteem, drinking behavior motives, aggression, collectivism, and cognitive failures. Specifically, for Native Americans, the experimental group would show lower self-esteem scores, higher scores for drinking behavior motives, higher scores for aggression, higher scores for collectivism, and higher scores for cognitive failures, compared to control group participants. In contrast, for Caucasians, the experimental and control groups would show no differences on the various measurement scales.

Participants

A convenience sample of self-identified Native American and Caucasian college students attending undergraduate courses were recruited as participants from The University of Montana campus. Subjects were at least 18 years old and were recruited via the Psychology 100 course pool and from other courses offered by the Department of Psychology. Both males and females were included in this study. Caucasian participants were limited to individuals who indicated they were residents of Northern Plains states that tend to have a higher Native American population; Montana, Wyoming, Idaho, Oregon, Minnesota, North Dakota and South Dakota. Residents of these states tend to be exposed to more negative views of Native Americans, primarily stemming from resource competition (land, natural resources, etc). Individuals who are from states that have a less defined Native American population are more likely to be more exposed to romanticized stereotypes of Native Americans and may not be affected in the same way by a Native American ethnicity cue. Therefore, Caucasian participants were excluded

based on state residency in order to control for what genre of stereotypes they may have about Native Americans.

It was originally planned to sample 40 individuals from each ethnic population (N = 80) to participate, which would equate to 20 individuals from each ethnic group in each condition. However, due to time constraints data collection was stopped prior to reaching the proposed sample size, which resulted in 33 Native American and 37 Caucasian participants (N = 70). Participants were randomly assigned to either the control group or the experimental group (Native Americans: Control = 10, Treatment = 23; Caucasian: Control = 20, Treatment = 17)[1].

Measures

Screening Instrument (Phase I). Participants initially volunteered to be involved in a screening session where they were given a short demographic questionnaire (Appendix A). This provided a means to identify participants that met the selection criteria. Participants who were Caucasian and indicated they were from an included state were contacted for participation in phase II, as well as participants who identified as being Native American. The initial screening process generated demographic data that was also used to statistically analyze the data.

Priming/Control Instruments (Phase II). Each participant completed a short, one-page survey used as either the priming instrument or control instrument. Each of the surveys can be viewed in the appendices and were developed specifically for this study by the author. The priming instrument consisted of 10 items that inquired about Native

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[1] A quasi-random method was used for the participants who were assessed without a double-blind procedure. This was done to increase the number of Native American participants who were run, and attempt to balance the sample numbers in the Native American control and treatment groups. For this task, the participant packets were arranged to alternate between a control and treatment packet and then were reshuffled in groups of five to ensure random assignment. Unfortunately, this did not alleviate the issue, therefore there is imbalance between the numbers of Native American participants in the control and treatment group.

American identity and cultural participation (Appendix D). The control instrument consisted of 10 items that inquired about consumer behaviors (Appendix C). Each priming/control instrument took less than a minute to complete.

Dependent Variable Instruments (Phase II). Next, both groups (experimental and control) completed four self-report measures. The first was the Drinking Motives Assessment (M. L. Cooper, Russell, Skinner, & Windle, 1992), second was the Cognitive Failures Questionnaire (Broadbent, Cooper, FitzGerald, & Parkes, 1982), third was the Aspects of Identity IIIx containing a collective identity subscale (Tropp & Wright, 2001), and finally Rosenberg's General Self-Esteem Scale (Rosenberg, 1965). Each dependent variable was calculated using the mean Likert Scale value selected for each measure by the participant, with the exception of the Aspects of Identity scale, which took into consideration an ipsatized score that reflected a participant's isolated level of collectivism. The ipsatized score represents the degree to which participants valued collectivism *more so* than the other two aspects of their identity.

Procedure

Participants who were screened during Psychology 100 mass testing/screening opportunities and deemed eligible for the study were then contacted by an undergraduate lab assistant and invited to participate in the second phase of the study. If the student indicated interest, they were then scheduled for participation in phase II of the project, which was conducted with each participant individually by the lab assistant. When participants arrived at the designated screening room, they were given a consent form by the experimenter. Participants were informed that the data collected would be used to assess general information on student's personalities, beliefs and attitudes. Procedures

for completing the questionnaire were read to the participant, as well as located on an instruction sheet taped to each participation packet. The experimenter then instructed the participant to complete the questionnaires. Upon completion of the instruments, participants were asked to seal their surveys in the large manila envelope provided and were then given a debriefing letter and released.

Experimental group. Participants in the experimental group prior to completing the survey packet completed the one-page "priming" questionnaire (Appendix D). This questionnaire had the look of a basic demographic questionnaire, but also contained a few questions relevant to Native American identity. This is similar to previous ethnicity primes used in research discussed earlier (e.g., Steele & Aronson, 1995).

Control group. Participants in the control group prior to completing the survey packet completed the one-page "control" questionnaire (Appendix C). This control questionnaire was designed to parallel the "priming" questionnaire, except that it did not have questions related to ethnicity. Rather than inquiring about ethnicity, it asked participants about neutral preferences. After completing the "control" questionnaire, participants in this group then completed the self-report measures discussed earlier.

RESULTS

Analytic Strategy

To assess if there are statistical differences between the experimental prime and control groups that varied by ethnicity, a two-way fixed effect ANOVA was used to examine the mean differences at a .05 alpha level. Specifically, a 2 (prime vs. no prime) x 2 (Native American vs. Caucasian) factorial ANOVA was run on each dependent variable. The data was examined to identify both the main effect of the prime, as well as

test the key hypothesized interaction effects that may have occurred between the independent variables (ethnicity x priming).

Possible Issues & Confounds

As with any study, there is always the possibility that confounding variables have influenced the analyzed data. In order to assess this, several additional collected variables were tested by adding them as an independent variable to the 2 X 2 ANOVA design described above, and looking to see if the potential confound produced any significant main or interaction effects. The following is a summary of each test.

Pre/Post Double-Blind Procedure. Due to time constraints, the double-blind procedure was broken during the last set of participants run for this study. During the last semester of the data collection only, Native American participants were run for the study. To summarize, there were 46 double-blind participants (Native American: $n = 14$, Caucasian: $n = 35$) and 19 Native American participants who participated without the double-blind procedure. Analysis of this possible confound in a 2 (Ethnicity) X 2 (Prime) X 2 (Double-Blind: Yes or No) indicated that it did not have influence over the final statistical results presented below, as no main effects, nor interactions with other variables, emerged for the Double-Blind variable, F's < 1.

Dual Ethnicity. Another change to the study's procedure, done for time reasons, was including participants that reported being Native American and Caucasian. During the last data collection attempt, these individuals were allowed to participate in the second phase of the study and included in the Native American sample in order to increase the number of available Native American participants. A 2 (Ethnicity) X 2 (Prime) X 2 (Bi-ethnic: Yes or No) analysis was conducted to assess whether bi-ethnicity

accounted for any mean variance of the dependant variables measured. The statistical test suggested that only one significant interaction was present between ethnicity and bi-ethnic status, which occurred with the Aspects of Identity questionnaire's measure of collectivism $F(1,66) = 5.41$, $p = .023$. However, it is worth noting that collectivism did not provide one of the stronger effects for the study; thus, of the key findings reported below, almost all of them remain mostly unaffected by the bi-ethnic issue. This suggests that in the present study participants who indicated that they were Native American and Caucasian showed a similar pattern to Native American participants.

Level of Interaction with Native American Community. Another related possibility is that interaction with or exposure to Native American communities may have had influence on the key findings, which was assessed using a 2 (Ethnicity) X 2 (Prime) X 4 (relationship to Native American Community). This test looked at data from the demographic survey completed by participants during the screening session (phase I) that asked questions about level of community interaction, specifically (1) Have you ever lived on a reservation?; (2) Have your parents/grandparents ever lived on a reservation?; (3) Are you an enrolled member or descendant of an enrolled member of a Native American tribe? I summarized this question set into a single number based on the number of questions they answered yes to (e.g., 0 = answered no to all questions, 1 = answered yes to 1 question, 2 = answered yes to 2 questions, 3 = answered yes to all questions). Analysis of this possible confound indicated that it did not have influence over the final statistical results presented below, F's < 1.

Primary Results

General Self-Esteem Questionnaire (GSE). Analyses on the General Self-Esteem Scale (GSE) suggested that both ethnic groups showed an increase in their GSE scores when primed, which was not hypothesized for the Native American participants, and also unexpected for the Caucasian participants. Participants in the treatment conditions reported higher scores than participants in the control conditions for both Native Americans (CONTROL: $M = 2.91$, PRIMED: $M = 3.22$) and Caucasians (CONTROL: $M = 2.96$, PRIMED: $M = 3.22$). This main effect of the prime approached, but did not attain, statistical significance $F(1,65) = 3.87$, $p = .053$. The ethnicity X prime interaction effect was not significant on the GSE measure, F's < 1.

Drinking Motives Questionnaire (DMQ). Analyses on the Drinking Motives Questionnaire (DMQ) suggested that the manipulation did not work as predicted. No main effect emerged for the ethnicity prime, $F < 1$. However, it is interesting to note that the mean pattern was different for each ethnic group, with Native Americans (*CONTROL M = 2.00*, PRIMED *M = 1.65*) showing a drop in drinking motives when primed and Caucasians (*CONTROL* M = 1.72, PRIMED *M = 1.86*) showing a slight rise. However, the interaction effect was not significant, $F(1,66) = 2.25$, p = .138.

Aggression Questionnaire (AGG). Analyses on the Aggression Questionnaire (AGQ) suggested that the manipulation effect was in a direction opposite of what was predicted. In particular, data suggested a decrease in aggression for Native Americans in the primed group, compared to Native Americans in the control group (CONTROL: $M = 2.98$, PRIMED: $M = 2.46$), but did not differ for the Caucasian sample (CONTROL: $M = 2.20$, PRIMED: $M = 2.38$). This interaction was statistically significant, $F(1,66) = 4.61$, p = .035.

Aspects of Identity Questionnaire (AOI). Analyses on the Aspects of Identity Questionnaire (AOI) ipsatized scores (level of collectivism isolated from social and personal collectivism) did not suggest a main effect for the primed group, $F < 1$. However, the overall mean pattern did conform to predictions, as Native American participants showed an increase in levels of collectivism (CONTROL: $M = -.870$, PRIMED: $M = -.470$), whereas Caucasian participants reported a lower level of collectivism when primed (CONTROL: $M = -.883$, PRIMED: $M = -.999$). However, the interaction effect only neared significance, $F(1,66) = 3.15$, $p = .080$.

Cognitive Failures Questionnaire (CFQ). Analyses on the Cognitive Failures Questionnaire (CFQ) suggested that the stereotype prime did not work in the direction expected for the Native American participants. In particular, both ethnic groups showed a decrease in their CFQ scores when primed. The PRIME reduced CFQ scores both for Native American participants (CONTROL: $M = 2.21$, PRIMED: $M = 1.85$) and Caucasian participants (CONTROL: $M = 1.88$, PRIMED: $M = 1.67$), main effect $F(1,66) = 4.15$, $p = .046$. The interaction effect was not significant on the CFQ measure, $F < 1$.

DISCUSSION

Results of the statistical tests were expected to show that stereotypes are internalized into the self-concept of Native American participants who had been exposed to a stereotype threat. It was expected that a significant interaction term would occur for the ANOVA between the prime and ethnicity variables. In other words, it was predicted that priming *would not* have the same effect on each experimental group; rather the effect would only occur in the Native American experimental group, as demonstrated by within-group differences between the experimental and control group means. In contrast,

Caucasian experimental and control groups would not show significant differences between the control and treatment group means.

The actual results showed a pattern that largely did *not* conform to predictions about stereotype confirmation, but nonetheless did powerfully show the effect of the prime for some, but not all, of the variables of interest (see Table 1). In particular, it was expected that the direction of the difference in Native American scores would indicate stereotype confirmation, in the sense that Native American participants in the treatment group would indicate higher scores for stereotypical behavior (i.e. higher scores in aggression, collectivism, cognitive failures, lack of self-esteem, and negative drinking motivations). In fact, just the opposite occurred with the Native American participants for each of the dependent variables measured, Native Americans in the treatment group indicated a positive difference in scores compared to Native Americans in the control group (see Table 2).

In other words, the key theoretical concept that seemed relevant here was not *stereotype internalization*, but rather *positivity*. For the two variables likely viewed positively by Native Americans (self-esteem, collectivism), priming increased scores, but for the three variables likely viewed negatively (drinking motives, aggression, and cognitive failures), priming decreased scores. It is worth noting that the only variable that showed a pattern directly consistent with predictions was collectivism – also the only variable that was stereotypic of Native Americans in a positive way. This type of coping behavior may be viewed as *selective self-stereotyping*, "the process by which members endorse positive group stereotypes for themselves and closest in-group affiliates, and distance themselves and the closest in-group from the negative stereotypes" (Oswald &

Chapleau, 2010, p. 919). Cohen & Garcia (2005) identified a similar concept, *social identity affirmation*, which is when "participants rated themselves more stereotypically, not for negative traits, but selectively, for neutral and positive ones" (p. 573). However, Lun, Sinclair, and Cogburn (2009) suggest that, "members of a social group may be able to consciously eschew negative in-group stereotypes as characteristics of the self, but they may still nonconsciously associate these traits with the self" (p. 125).

Resisting Stereotype Confirmation in Native Americans?

In this study, why were Native Americans able to resist falling into stereotype confirmation or the self-fulfilling prophecy effect? One explanation is that the study's participants engaged in a form of compensation, which may or may not have been consciously intentional. Cohen & Garcia (2005) refer to this behavior as "social identity management strategies," such as distancing or affirming one's relationship to their group's stigma (p. 580). Distancing is also described by Miller & Major (2000) as disconfirming stereotyped expectations, "Disconfirmations of stereotypes distances a stigmatized person from the stigma: The stigmatized person displays attitudes, behaviors, symbols, and signs that he or she is not like other people in the stigmatized group" (p. 253). Steele and Aronson (2000) also found that participants in their study avoided endorsing preferences that were associated with their ethnic group when faced with a situation that evoked stereotype activation. This explanation when applied to this study suggests that the Native American participants in the primed condition may have been attempting to avoid being stigmatized during their participation, whereas Native American participants in the control condition did not feel it necessary to compensate because they had not been exposed to a scenario that facilitated stereotype confirmation.

It should also be noted that over the course of collecting data for this study, Native American events were more represented in the campus and community media. Two significant events occurred that are worth mentioning. The first was the recent erection and opening of the Payne Family Native American Center. This building gained a large amount of press attention and is also centrally located on the University of Montana campus. This building signified administrative and collegiate support to the Native American students, faculty, and staff and may have changed how Native Americans felt about being affiliated with the university. Also, the Native American student club on campus received a public apology from the university for a mishap with event funding during the previous year. This may have led students to have a general feeling of being defensive of their cultural group while on campus.

Another explanation to consider is that the priming mechanism was potentially too obvious on the instrument, so that the ethnicity suggestion went above subtle recognition. If the priming cue was such that it was less consciously detectable (e.g., subliminal primes), the results may have turned out differently. Greenwald & Banaji (1995) suggest that, "when a cue in question is cognized clearly, reduction of its implicit effect likely occurs because the judge can anticipate and compensate for the event's possible influence" (p. 18). Taking this idea into consideration suggests that this study may have measured Native American participants in the priming group consciously attempting to avoid stereotype confirmation, whereas if the prime was out of participants' awareness it may have been able to manipulate the variables in the hypothesized direction.

The type of measurement tools used to assess the participants' self-concept may also have influenced this study. Each of the dependent variables were measured with a self-report inventory, also referred to as explicit measures. According to Greenwald, Rudman, Nosek, Banaji, Farnham, & Mellott (2002), "self-report measures are susceptible to artifacts (such as impression management and demand characteristics) that can distort reporting even of associations that are introspectively available" (p. 8). On the other hand, implicit measures, "might be able to measure associations for which the respondent lacks awareness," (Greenwald, et. al., 2002, p. 17). Thus, this explanation may point to why Native American participants in the primed groups were able to selectively endorse or reject stereotype activation.

Unexpected Findings for Caucasian Participants

It is also worth noting that it was predicted that the Caucasian participants would not indicate treatment vs. control group differences in scores. In fact, the Caucasian participants in the treatment group indicated a difference in dependent variable means than participants in the control group (see Table 2). Specifically, Caucasians in the treatment group had the same direction of change as the Native Americans for the self-esteem and cognitive failures measurements. However, for the remaining variables (drinking motives, aggression, and collectivism), Caucasians demonstrated manipulation in the opposite direction as the Native American treatment group participants. The following is a synopsis of the direction of difference found within the Caucasian sample, with the caveat that this is not referencing statistical significance.

When primed Caucasian participants indicated in increase in self-esteem, which may suggest that participants in this group were engaging in downward comparison in

relation to Native Americans. Caucasian participants also indicated an increase in negative drinking behaviors and aggression when primed with Native American ethnicity, which may be due to the participants experiencing activation of the stereotypes in their own behavior, even though they do not belong to the stigmatized group of interest. They also demonstrated a decrease in self-reported levels of collectivism and cognitive failures when primed with Native American ethnicity. One explanation for this ethnicity difference in manipulation direction may be related to the value that Caucasian and Native American cultures assign to behaviors on aggression, drinking, and collectivism. Caucasians may indicate less concern or focus on drinking behaviors and they tend to value individualism, however those concepts have an opposite view in most Native American cultures. For the variables that indicated Caucasian manipulation direction matched the Native Americans, this may be related to Caucasian participants in the treatment group engaging in a downward comparison, which would lead to a temporary spike in self-esteem and decrease in self-reported cognitive failures. These results are interesting and warrant future follow-up studies, to possibly add a measure of people's worth they hold for the variables of interest.

Limitations

Limitations of this study should also be taken into consideration. The participants in this study are not representative of the population at-large. Subjects were sampled from courses offered within the psychology department, with the largest sub-sample coming from Introduction to Psychology. Not only does this method of sampling limit participants to a subset who take a course from a particular department, but also to a particular age group (with most being in the 18-19 age range). Another significant issue

regarding sample populations that needs to be considered is the random imbalance of Native American participants between the control and treatment groups. Due to chance, the random assignment of Native American participants resulted in 23 participants in the treatment group and 10 participants in the control group.

In regards to the measurements used in this study, it may be possible that the instruments chosen for this project do not have validity with Native Americans. Unfortunately, it is often the case that assessment tools have not been validated for specific use with Native Americans and should always be taken into consideration when considering the types of assessment tools used with Native American populations. For example, research suggests that measurements of self-esteem may lack validity in collectivist cultures (Heine, Kitayama, & Lehman, 2001).

Finally, it should be mentioned that the Native American sample is not representative of the overall Native American population. Specifically, an ecological validity issue may be that Native American students who attend the University of Montana are different from Native Americans who (1) are not in college, (2) who attend a smaller academic institution or tribal college, or (3) do not live off a reservation. Also, it should also be mentioned that the literature, specifically, Armenta (2010) suggests that, "stereotype threat effects should be more pronounced among individuals who strongly identify with their stereotyped group" (p. 94). In his research with Asian American and Latino participants, Armenta (2010) found that highly ethnically identified individuals were more susceptible to an ethnic stereotype cue, compared to participants who did not solidly identify with their minority status. Unfortunately, level of ethnic identification was not a variable in the study, but would be worthwhile investigating further. While

these limitations do not invalidate the results of the present study, it suggests (1) areas that should receive further research attention, and (2) a strong caution when generalizing its results across Native American populations.

CONCLUSION

In examining further the effects stereotypes have on members of stigmatized groups, society as a whole will be better equipped to (1) thoroughly comprehend the detrimental impact stereotypes have on individuals, (2) protect and empower individuals who encounter differential treatment caused by stereotypes, and (3) support the notion that societies need to move towards tolerance and away from stigmatizing in a manner that is used to disenfranchise and/or oppress others. This study is intended to directly benefit society by explaining how stereotypes can influence one's behavior, for better or worse.

This study also aimed to benefit individual participants. After participating, each individual was given a debriefing form that defined *stereotype activation* and how it might influence human behavior. According to the literature, if individuals are aware of how stereotype activation works, they are less susceptible to being affected by it. Therefore, learning about this phenomenon will lead to a better understanding and awareness of stereotype activation and how it functions. Awareness of this process may create a buffer for the individual and will, in the future, empower them to consciously resist forms of unconscious manipulation that may lead them to behave in accordance with stereotype expectations or it may increase their awareness of how they may be engaging in resisting stereotype confirmation. At a broader level, it is the hope that this

study will directly benefit the Native American community by contributing greater clarification concerning *how* stereotypes can influence *one's self-concepts.*

In conclusion, it appears that the study's hypothesis was worthy of investigating and would benefit from (1) additional post hoc analysis of the data relative to each ethnic group, (2) replication with a larger and more diverse sample, and (3) conducting the study as a true double-blind study. At its basic core, this study demonstrated that when primed with Native American ethnicity the self-concept of Native Americans and Caucasians is different compared to individuals who have not been primed.

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Appendix A: Participant Screening Questionnaire

1. Gender: Male   Female

2. Age: _____

3. Which year of college or graduate school are you in? _____

4. Major: _____

5. State of Residency (please specify): _____

6. State where you were born (please specify): _____

7. What is your ethnic background? If you identify with more than one ethnic group, please circle/write all that apply.

       a. Caucasian American
       b. African American
       c. Asian American
       d. Latin American
       e. Native American
       f. Others (please specify): _____

Appendix B: Phase II Packet Instruction Sheet

1. Remove the survey packet from the envelope.

2. Complete the survey with pen.

3. Do not leave any questions unanswered. Choose the answer that best fits.

4. It is important that you fully complete each page before moving onto a new page.

5. Please do not skip pages or return to previous pages because doing so may interfere with your data quality.

6. When you have finished, place the completed packet into the envelope and seal it.

7. Then, open your door slightly to indicate that you are finished and someone will come and retrieve your packet.

8. If you have questions, open your door slightly to indicate that you need assistance, and someone will be there shortly.

9. Again, thank you for your help with this study. ☺

Appendix C: Control Instrument

Please answer the following questions. All answers will be kept confidential.
DO NOT PUT YOUR NAME ON THIS SURVEY.

1.   Do you live in student housing?   Yes   No

2.   What is your current student status? (Circle one)

    Freshman   Sophomore   Junior   Senior   Graduate School

3.   Employment Status (circle one):

    Part Time   Full Time   Unemployed

4.   How many semesters have you attended University of Montana?   _____

5.   Do you use a cellular phone?   Yes   No

6.   Do you currently pay for internet access?   Yes   No

7.   Where do you usually access the internet?

    Home   Work   Library   None

8.   With which company do you have an email account? (Circle all that apply)

    Yahoo   Hotmail   AOL   Google

    Qwest   Comcast   University   Employer

Appendix D: Priming Instrument

**Please answer the following questions. All answers will be kept confidential.
DO NOT PUT YOUR NAME ON THIS SURVEY**

1.   What year in school are you? (Check one):

         Freshman   Sophomore   Junior   Senior   Graduate School

2.   Employment Status (check one):   Part Time   Full Time   Unemployed

3.   How many years have you resided in Montana? _____

4.   Have you ever lived on a Native American reservation?   Yes   No

5.   Have your parents and/or grandparents ever lived on a Native American reservation?

         Yes   No

6.   Are you an enrolled member OR descendant of an enrolled member of an American Indian tribe?

         Yes   No

7.   What is your primary religious/spiritual orientation?

         Catholic   Christian   Jewish   Muslim

         Buddhist   None   Other _____

8.   Which of the following education funding sources do you receive? (Circle all that apply)

         Pell Grant   Student Loans   Parent Loans   Tuition Waivers

         Tribal   Scholarships   Parent/Family Member   None

Appendix E: Rosenberg's General Self-Esteem Scale (Rosenberg, 1965)

Instructions: Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle **SA**. If you agree with the statement, circle **A**. If you disagree, circle **D**. If you strongly disagree, circle **SD**.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.	I feel I do not have much to be proud of.	SA	A	D	SD
6.	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.	I wish I could have more respect for myself.	SA	A	D	SD
9.	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

Appendix F: Drinking Motives Questionnaire (M. L. Cooper et al., 1992)

1.   How often do you drink as a way to celebrate?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

2.   How often do you drink because it is what most of your friends do when you get together?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

3.   How often do you drink to be sociable?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

4.   How often do you drink because it is customary on special occasions?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

5.   How often do you drink because it makes a social gathering more enjoyable?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

6.   How often do you drink to relax?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

7.   How often do you drink to forget your worries?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

8.   How often do you drink because you feel more self-confident or sure of yourself?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

9.   How often do you drink because it helps when you feel depressed or nervous?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

10. How often do you drink to cheer up when you're in a bad mood?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

11. How often do you drink because you like the feeling?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

12. How often do you drink because it is exciting?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

13. How often do you drink to get high?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

14. How often do you drink because it's fun?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

15. How often do you drink because it makes you feel good?
☐ Almost never/never   ☐ Sometimes   ☐ Often   ☐ Almost always

Appendix G: Aggression Questionnaire (Buss & Perry, 1992)

Instructions: Using the 5 point scale shown below, indicate how uncharacteristic or characteristic each of the following statements is in describing you. Place your rating in the box to the right of the statement.

1 = extremely uncharacteristic of me
2 = somewhat uncharacteristic of me
3 = neither uncharacteristic nor characteristic of me
4 = somewhat characteristic of me
5 = extremely characteristic of me

1.   Some of my friends think I am a hothead

2.   If I have to resort to violence to protect my rights, I will.

3.   When people are especially nice to me, I wonder what they want.

4.   I tell my friends openly when I disagree with them.

5.   I have become so mad that I have broken things.

6.   I can't help getting into arguments when people disagree with me.

7.   I wonder why sometimes I feel so bitter about things.

8.   Once in a while, I can't control the urge to strike another person.

9.*   I am an even-tempered person.

10.   I am suspicious of overly friendly strangers.

11.   I have threatened people I know.

12.   I flare up quickly but get over it quickly.

13.   Given enough provocation, I may hit another person.

14.   When people annoy me, I may tell them what I think of them.

15.   I am sometimes eaten up with jealousy.

16.*   I can think of no good reason for ever hitting a person.

17.   At times I feel I have gotten a raw deal out of life.

18.   I have trouble controlling my temper.

19.   When frustrated, I let my irritation show.

20.   I sometimes feel that people are laughing at me behind my back.

21.   I often find myself disagreeing with people.

22.   If somebody hits me, I hit back.

23.   I sometimes feel like a powder keg ready to explode.

24.   Other people always seem to get the breaks.

25.   There are people who pushed me so far that we came to blows.

26.   I know that "friends" talk about me behind my back.

27.   My friends say that I'm somewhat argumentative.

28.   Sometimes I fly off the handle for no good reason.

29.   I get into fights a little more than the average person.

Appendix H: Aspects of Identity Scale IIIx (Tropp & Wright, 2001)

These items describe different aspects of identity. Please read each item carefully and consider how it applies to you. Fill in the blank next to each item by choosing a number from the scale below.

> 1 = Not important to my sense of who I am
> 2 = Slightly important to my sense of who I am
> 3 = Somewhat important to my sense of who I am
> 4 = Very important to my sense of who I am
> 5 = Extremely important to my sense of who I am

_____1. The things I own, my possessions
_____2. My personal values and moral standards
_____3. My popularity with other people
_____4. Being a part of the many generations of my family
_____5. My dreams and imagination
_____6. The ways in which other people react to what I do
_____7. My race or ethnic background
_____8. My personal goals and hopes for the future
_____9. My physical appearance: My height, my weight, and the shape of my body
_____10. My religion
_____11. My emotions and feelings
_____12. My reputation, what others think of me
_____13. Places where I live or where I was raised
_____14. My thoughts and ideas
_____15. My attractiveness to other people
_____16. My age, belonging to my age group or being part of my generation
_____17. The ways I deal with my fears and anxieties
_____18. My role as a student in college
_____19. My feeling of being a unique person, being distinct from others
_____20. My social class, the economic group I belong to whether lower, middle, or upper class
_____21. Knowing that I continue to be essentially the same inside even though life involves many external changes
_____22. My gestures and mannerisms, the impression that I make on others
_____23. My feeling of belonging to my community
_____24. My self-knowledge, my ideas about what kind of person I really am
_____25. My social behavior, such as the way I act when meeting people
_____26. My feeling of pride in my country, being proud to be a citizen
_____27. My physical abilities, being coordinated and good at athletic activities
_____28. My personal self-evaluation, the private opinion I have of myself
_____29. Being a sports fan, identifying with a sports team
_____30. My occupational choice and career plans
_____31. My commitments on political issues or my political activities
_____32. My academic ability and performance, such as the grades I earn ad comments I get from teachers (S)
_____33. My language, such as my regional accent or dialect or a second language that I know
_____34. My sex, being a male or a female

Appendix I: The Cognitive Failures Questionnaire (Broadbent et al., 1982)

The following questions are about minor mistakes which everyone makes from time to time, but some of which happen more often than others. We want to know how often these things have happened to you in the past 6 months. Please circle the appropriate number.

		Very often	Quite often	Occasionally	Very Rarely	Never
1.	Do you read something and find you haven't been thinking about it and must read it again?	4	3	2	1	0
2.	Do you find you forget why you went from one part of the house to the other?	4	3	2	1	0
3.	Do you fail to notice signposts on the road?	4	3	2	1	0
4.	Do you find you confuse right and left when giving directions?	4	3	2	1	0
5.	Do you bump into people?	4	3	2	1	0
6.	Do you find you forget whether you've turned off a light or a fire or locked the door?	4	3	2	1	0
7.	Do you fail to listen to people's names when you are meeting them?	4	3	2	1	0
8.	Do you say something and realize afterwards that it might be taken as insulting?	4	3	2	1	0
9.	Do you fail to hear people speaking to you when you are doing something else?	4	3	2	1	0
10.	Do you lose your temper and regret it?	4	3	2	1	0
11.	Do you leave important letters unanswered for days?	4	3	2	1	0
12.	Do you find you forget which way to turn on a road you know well but rarely use?	4	3	2	1	0
13.	Do you fail to see what you want in a supermarket (although it's there)?	4	3	2	1	0
14.	Do you find yourself suddenly wondering whether you've used a word correctly?	4	3	2	1	0
15.	Do you have trouble making up your mind?	4	3	2	1	0
16.	Do you find you forget appointments?	4	3	2	1	0
17.	Do you forget where you put something like a newspaper or a book?	4	3	2	1	0
18.	Do you find you accidentally throw away the thing you want and keep what you meant to throw away – as in the example of throwing away the matchbox and putting the used match in your pocket?	4	3	2	1	0
19.	Do you daydream when you ought to be listening to something?	4	3	2	1	0
20.	Do you find you forget people's names?	4	3	2	1	0
21.	Do you start doing one thing at home and get distracted into doing something else (unintentionally)?	4	3	2	1	0
22.	Do you find you can't quite remember something although it's "on the tip of your tongue"?	4	3	2	1	0
23.	Do you find you forget what you came to the shops to buy?	4	3	2	1	0
24.	Do you drop things?	4	3	2	1	0
25.	Do you find you can't think of anything to say?	4	3	2	1	0

Appendix J: Debriefing Form

As humans, our tendency to operate socially is often based on unconscious automatic thinking. Social psychologists have conducted various studies demonstrating that individuals who are subtly exposed to ideas of social differences will then unconsciously make changes in their behavior to match the expected behavior related to stereotypes that exist. Research of this nature has been conducted using such identities as gender, age, IQ level, socioeconomic status, and ethnicity.

Stereotypes can be very pervasive and usually lead individuals to automatically respond to social situations. It is perhaps unsurprising, given the instinctive nature in which they are applied, that members of stigmatized groups often experience differences in treatment by non-stigmatized individuals.   This differential treatment may actually influence how individuals view themselves in relation to their social environment. Most importantly, people may not be consciously aware of this trend, nonetheless it impacts the behavior and internal thought processes of all people involved.

In order for individuals to avoid being affected by stereotypes, one must be consciously aware of how one's behavior and thoughts might be influenced by stereotypic beliefs. The hope of this study is to deepen the understanding of these mechanisms and how they operate socially. In doing so, the results of this study will provide a catalyst to educating members of stigmatized groups about stereotype activation and how to avoid allowing it to unconsciously influence them. This study aims to provide clarification of exactly *how* stereotype activation works by measuring how ethnicity status influences one's view of the self. This study is investigating whether stereotypes are internalized by individuals of dominant and non-dominant ethnic backgrounds.

As a participant, you were randomly assigned to be in the "ethnicity cue" group or the "student cue" group. You were then asked to complete questionnaires that measured behaviors often associated with stereotypes of Native Americans. This is to find out whether thinking about your relationship to a minority group affects how you report beliefs about yourself. Some of you also completed a survey that measures your level of acculturation. This survey was used to determine if level of acculturation influences your susceptibility to activation of stereotyped responses.

Your participation in this study is very appreciated! If you would like any additional information on this study, or the measures involved, please contact Laura R. John at 406-243-6347 or laura.john@umontana.edu.

If you feel that you are in need of assistance with any emotional difficulties that you are now experiencing, please contact one of the following resources:

Counseling and Psychological Services (CAPS	243-4711
Clinical Psychology Center	243-2367
American Indian Student Support (AISS)	243-6306
Missoula Indian Center	721-2700

Table 1

Means of Dependent Variables

	Caucasian Control (n = 20)	Caucasian Treatment (n = 17)	Native American Control (n = 10)	Native American Treatment (n = 23)
General Self-Esteem	2.96	3.22	2.91	3.22
Drinking Motives	1.72	1.86	2.00	1.65
Aggression	2.20	2.38	2.98	2.46
Collectivism	-.883	-.999	-.870	-.470
Cognitive Failures	1.88	1.67	2.21	1.85

Table 2

Direction of Variable Manipulation for Treatment Groups

	Caucasian (n = 17)	Native American (n = 23)
General Self-Esteem	Increased	Increased
Drinking Motives	Increased	Decreased
Aggression	Increased	Decreased
Collectivism	Decreased	Increased
Cognitive Failures	Decreased	Decreased