“Exposure to Multicultural Environments: 
Influence on Social Relationships and Altruistic Behavior”

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Abstract
This research explores the relationship between multiculturalism, diversity, and altruistic behaviors. The researchers hypothesized that individuals with more accepting attitudes toward multiculturalism would be more comfortable with diversity and manifest more altruistic behavior compared to those with less accepting attitudes toward multiculturalism. In addition, the researchers also hypothesized that individuals primed with multicultural images would be more likely to be comfortable with diversity and show more altruistic behavior than those primed with American images. Multiple 2x2 ANOVA tests were utilized to study the effects of multicultural attitudes and cultural priming on comfort with diversity and altruistic behavior. No significant main effect of the priming strategies was found; however, attitudes toward multiculturalism did have a significant effect on all three of the dependent variables, such that participants that scored high on multicultural acceptance were more accepting of diversity and more likely to donate both time and money to a person in need.

Keywords: Multiculturalism, diversity, altruism.
Introduction

The word multicultural seems to be more common nowadays, because culture plays a significant role in our daily lives. Culture is a lens that affects how we see the world (Hong, Morris, Chiu, & Benet-Martinez, 2000), and a multicultural environment provides people with the possibility to interact with people from other cultures (Bodziany, 2008). In addition, race seems to play an important role when forming new relationships. People often show a preference for those who are very similar to them, especially in terms of race and ethnicity (Clark & Tuffin, 2015). From the perspective of cultural psychology, individualism and collectivism are constructs that outline the differences in relationships between individuals and societies, with collectivists tending to value interdependence and individualists tending to value independence (Oyserman & Lee, 2008). This study will examine multicultural-accepting attitudes and people’s preferences in establishing relationships with individuals of diverse cultural backgrounds.

According to the Constructivist Theory, culture is based on constructs, constructs that vary depending on how we use them and how accessible they are. A perfect example comes from priming strategies that can activate a construct without the participant’s awareness that they are being primed (Hong et al., 2000). Certain strategies or methods can prime people to think in a collectivistic or individualistic way. When subjects are primed to have an individualistic self-concept, they are going to focus more on special or distinctive traits and attributes, and focus less on social roles and relationships (Oyserman & Lee, 2008). Previous researchers have used American and Chinese images to prime participants with either an individualistic or a collectivistic mindset, in order to try to identify differences between cultures (Hong et al., 2000).

The attitudes that people form toward multiculturalism play an important role in culture and attitudes about other groups. While members of ethnic minority groups tend to favor multiculturalism, individuals in the majority group often see multiculturalism as a threat rather than a benefit (Verkuyten & Martinovic, 2006). In fact, Caucasians implicitly associate multiculturalism with exclusion compared to ethnic minorities (Plaut, Garnett, Flannery, Buffardi, & Sanchez-Burks, 2011). In addition, friendships with outgroup members tend to have a positive effect on multiculturalism (Verkuyten & Martinovic, 2006). Following the System Justification Theory and the Social Dominance Theory, which focus on social identity, members that belong to minority groups are more likely to favor multiculturalism than members of the majority group (Verkuyten, 2005).
The conventional models of organization and organizational behavior recognize that cooperation is a fundamental concept to the survival of members of social units (Wagner, 1995). Individualism and collectivism have an effect on group cooperation, such that individualists, who are independent, are less inclined to engage in cooperative behavior compared to collectivists, who are interdependent (Wagner, 1995). Cooperation is stronger in collectivistic societies compared to individualistic societies (Marcus & Le, 2013). This study will also examine if priming participants with a collectivistic point of view influences altruistic behaviors. The researchers hypothesized that individuals primed with multicultural images, or a collectivistic point of view, would be more likely to cooperate with or help someone in need compared to individuals primed with American images, or an individualistic point of view. In addition, the researchers hypothesized that participants who were primed with multicultural images would be more accepting of establishing relationships with people of diverse, multicultural backgrounds, compared to participants who were primed with American images. Lastly, the researchers hypothesized that individuals with more accepting attitudes toward multiculturalism, who will be referred to in this paper as having “high multiculturalism,” would be more altruistic and more likely to establish relationships with people from other cultures, compared to individuals with lower multicultural acceptance, or those with “low multiculturalism.”

The purpose of this research is to identify a relationship between multicultural attitudes and both comfort with diversity and altruistic behaviors, and to see if priming participants with multicultural attitudes can influence their decision on forming relationships with people from diverse, multicultural backgrounds. Given that previous studies have shown a relationship between collectivism and altruistic behavior, researchers also wanted to investigate the influence of the priming methods on multicultural attitudes and altruistic behaviors such as donating both time and money to an individual in need.

**Methods**

**Participants**

An email was sent out to students of the University of California, Santa Barbara (UCSB), asking them to participate in an anonymous online survey. One hundred and nineteen responses were received from undergraduate students at UCSB. Demographics such as age, race, and gender were not collected.
Design

A 2 (Cultural Prime: Individualistic/American vs. Collectivistic/Multicultural) x 2 (Multicultural Attitude: High vs. Low) ANOVA was utilized to assess these variables’ effect on altruistic behavior and comfort with diversity. Three dependent variables were measured: comfort with diversity, hours willing to volunteer to help someone in need, and amount of money donated to help someone in need.

Procedures

First, a link was emailed to participants via Qualtrics.com that directed them to the survey, where they were presented with a consent form. If participants decided not to give consent they were simply directed to the end of the survey; if participants gave consent, they were asked to complete The Munroe Multicultural Attitude Scale Questionnaire (Munroe & Pearson, 2006). Next, using Qualtrics, participants were randomly assigned to one of two conditions: American prime or multicultural prime. In the American prime condition, participants were presented with images of American icons, and in the multicultural prime condition, participants were presented with images of other cultures. After seeing the images, participants had to write 1-2 sentences reflecting upon the images they saw. They were then presented with a short story about a person in need, and had to complete a short survey regarding their feelings and thoughts about the story, as well as their willingness to help the person in need with time or money. Additionally, participants had to complete the Miville-Guzman Universality-Diversity Scale (Miville et al., 1999). Lastly, participants were presented with a debriefing form that stated the purpose of the study as well as contact information for additional questions about the study.

Measures

The Munroe Multicultural Attitude Scale Questionnaire (Munroe & Pearson, 2006) is a Likert scale consisting of 18 questions that assess attitudes toward people of different cultural backgrounds, as well as religious affiliations and socioeconomic status. Participants responded on a scale ranging from strongly disagree (1) to strongly agree (7). This scale was specifically employed to measure high vs. low multicultural acceptance. A median split was performed to split participants into high or low multicultural acceptance, with participants who scored a 1 rated as low in acceptance of multiculturalism. The following sentences are an example of the questions in the scale: “I accept the fact that languages other than English are spoken.” “I
respectfully help others to offset language barriers that prevent communication.” The questions in the scale were specifically measuring attitudes towards race, culture, gender, and socioeconomic status. This scale has been previously used by other researchers to measure multicultural attitudes of young people (Weiler, Helfrich, Palermo, & Zimmerman, 2013). The researchers used this scale as a valid form of measuring multicultural attitudes.

Additionally, participants were randomly assigned to either the American prime or to the multicultural prime. The American prime consisted of six images of American symbols: Uncle Sam, the Statue of Liberty, the American flag, the American bald eagle, the White House, and Mount Rushmore. These American images were employed to prime subjects to have an individualistic mindset. The multicultural prime condition consisted of six images of symbols from other cultures: a Mayan pyramid, a Chinese home, the Taj Mahal, a Mexican town, Vietnamese boys staring at a river, and a sculpted figure located in Cambodia. These multicultural images were employed to prime subjects to have a collectivistic mindset. In both conditions, participants were given 30 seconds to analyze the images and try to internalize their meaning and message. Immediately following the viewing of the images, the researchers asked participants to write 1-2 sentences on any common themes they found in the images presented to them. The purpose of having participants write the sentences was to make them reflect on the images they saw. Our study based this idea of priming participants from previous research in which Hong and colleagues (2000) primed participants with individualistic or collectivistic mindsets using either American or Chinese images.

In addition, the researchers asked participants to read a fictional story about Jane Smith, a UCSB student who lost her father and younger brother in a car accident and was left with two siblings and no financial support. Then participants were presented with a set of questions that asked how distressed they felt about Jane’s situation, using a scale ranging from not at all distressed (1) to extremely distressed (5). We also asked how willing they were to help Jane, using a scale ranging from not at all willing (1) to incredibly willing (5). Additionally, participants were asked how much money they would donate to support Jane if they were to receive $20. Participants had a bar ranging from $0 to $20 to signal how much they would like to donate (help money). Also, participants used a bar ranging from 0 hours to 40 hours to report how many hours per week they would like to volunteer for babysitting and providing transportation (help time). The purpose of the story was to measure altruistic behavior. More
specifically, the researchers’ objective was to measure who would be more willing to help Jane: those primed with American symbols or those primed with multicultural images.

Next, participants completed Miville-Guzman Universality-Diversity Scale (Miville et al., 1999), a scale consisting of 15 questions used to measure attitudes toward other races. Participants responded on a scale ranging from strongly disagree (1) to strongly agree (6), with participants who scored a 6 rated as more supportive of multiculturalism. Some of the questions were modified in order to make a more accurate measurement. The following are examples of questions in the scale: “I would like to join an organization that emphasizes getting to know people from different cultures.” “Getting to know someone of another race could be generally an uncomfortable experience for me.” With this scale, researchers intended to measure how comfortable an individual is being around people or socializing with people from different cultural backgrounds. Also, previous researchers have validated this scale by measuring diverse orientations on international Asian students (Kegel & DeBlaere, 2014). Researchers used this scale as a valid form to measure attitudes towards other races. Lastly, participants were presented with a debriefing form, which informed them about the design of the experiment. In addition, for further information regarding the study or the results, the debriefing form contained both the researchers’ and the professor's email.

Results

The researchers wanted to test the hypothesis that individuals with high multicultural acceptance would be more likely to perform altruistic behaviors and also more likely to establish relationships with people from other cultures, compared to those with lower multicultural acceptance. Participants who scored low in multicultural acceptance ($N = 119, 52.1\%$) were compared to individuals who scored high in multicultural acceptance ($N = 119, 47.9\%$). The data was analyzed through SPSS using 2x2 ANOVAs in order to determine significant differences.

The data was first analyzed using a 2 (Prime: Individualistic/American vs. Collectivistic/Multicultural) x 2 (High vs. Low Multicultural Acceptance) ANOVA on attitudes towards multiculturalism. It was hypothesized that participants primed with multicultural images would be more comfortable forming relationships with people of diverse cultural background compared to those primed with American images. The results showed no significant main effect of the primes on comfort with diversity [$F (1, 115) = 1.16, \text{n.s.}, Ms = 4.77 \text{ vs. } 4.88]$; the fact that
they were exposed to the multicultural prime or the American prime did not affect participants’ decisions in forming relationships with people of diverse cultural backgrounds. In addition, it was hypothesized that individuals with high multicultural acceptance would be more comfortable with diversity compared to individuals with low multicultural acceptance. The data showed a significant main effect of multicultural acceptance on comfort with diversity \( F (1, 115) = 22.9, p < .001, M_s = 5.07 \text{ vs. } 4.58 \), such that those who scored high in multiculturalism were more likely to feel more comfortable with diversity. In addition, it was hypothesized that people with high multicultural acceptance who were primed with multicultural images would be the most comfortable with diversity compared to all other conditions. The results showed a marginal interaction effect of multicultural attitudes and the prime condition participants were exposed to on comfort with diversity \( F (1, 115) = 3.01, p < .10 \), such that those who were exposed to the multicultural prime condition and who also scored high on multiculturalism were slightly more comfortable with diversity compared to those in all other conditions.

![Comfort with diversity](image)

**Figure 1: Comfort with diversity.**

A 2 (Prime: Individualistic/American vs. Collectivistic/Multicultural) x 2 (High vs. Low Multicultural Acceptance) ANOVA was also used to measure the effect of these variables on altruistic behavior (money donated). It was hypothesized that participants primed with multicultural images would be more likely to donate money to someone in need compared to those primed with American images. The results showed no significant main effect of the primes on the amount of money donated \( F (1, 115) = .31, \text{n.s.}, M_s = 18.43 \text{ vs. } 17.89 \), such that
participants were likely to donate money to someone in need regardless of the prime condition that they were exposed to. Also, it was hypothesized that individuals with high multiculturalism would be more likely to donate a larger amount of money compared to individuals with low multicultural attitudes. The data showed a significant main effect of multicultural attitudes on the amount of money donated by participants \( F(1, 115) = 4.36, p < .05, \text{Ms} = 19.18 \text{ vs. } 17.15 \).

Individuals who scored high on multiculturalism were more likely to donate a considerable amount of money to someone in need. Lastly, it was hypothesized that participants with high multiculturalism who were primed with multicultural images would be more likely to donate money to an individual in need compared to participants in all other conditions. There was no significant interaction effect of participants’ multicultural attitudes and the prime condition participants were exposed to on the amount of money they donated \( F(1, 115) = 1.10, \text{n.s.} \).

Individuals who were exposed to the multicultural condition and who also scored high on multiculturalism did not show any differences compared to other groups in donating money to an individual in need.

Figure 2: Amount of money donated.

Finally, a 2 (Prime: Individualistic/American vs. Collectivistic/Multicultural) x 2 (High vs Low Multicultural Acceptance) ANOVA was utilized to measure these variables’ effect on altruistic behavior (hours donated). The researchers hypothesized that participants primed with multicultural images would be more likely to volunteer time to someone in need compared to those primed with American images. The results showed no significant main effect of the primes on the amount of hours donated \( F(1, 115) = 0.00, \text{n.s.} \text{Ms} = 7.76 \text{ vs. } 7.79 \), such that the prime
conditions had no effect on the number of hours participants were willing to donate to an individual in need. In addition, the researchers hypothesized that individuals with high multicultural acceptance would be more likely to donate higher numbers of hours compared to individuals with low multicultural attitudes. The data showed a significant main effect of multicultural attitudes on the amount of hours participants were willing to donate \( F (1, 115) = 13.19, p < .001, M_s = 10.2 \text{ vs. } 5.35 \), such that participants who scored higher in multiculturalism were more likely to volunteer or to assist someone in need compared to those who scored lower. Finally, it was hypothesized that people with high multicultural acceptance who were primed with multicultural images would be more likely to donate hours to someone in need compared to all other conditions. No significant interaction effect of the prime condition participants were exposed to and their attitude toward multiculturalism was found on the amount of hours they were willing to donate \( F (1, 115) = 0.00, \text{n.s.} \), such that the interaction between the priming conditions and attitudes towards multiculturalism did not affect participants’ decisions on donating hours to someone in need.

![Number of hours donated](image)

*Figure 3: Number of hours donated.*

**Discussion**

Based on previous research, the researchers hypothesized that individuals with high multiculturalism would be more likely to form social relationships with people of diverse multicultural backgrounds compared to those with low multiculturalism. Individuals often prefer to form relationships with those who are very similar to them, especially in terms of race and ethnicity (Clark & Tuffin, 2015), and the researchers hypothesized that this effect would be
reduced by multicultural priming. Also, forming relationships with members of outgroups tends
to have a positive effect on multiculturalism (Verkuyten & Martinovic, 2006). The results of this
study showed significant effects of multicultural attitudes: individuals who scored high on
multicultural acceptance were more likely to form relationships and be comfortable around
people with diverse, multicultural backgrounds. Here, the researchers’ hypothesis was consistent
with previous findings (Clark & Tuffin, 2015).

In addition, based on previous research, the researchers hypothesized that those with
high multiculturalism would also be more likely to help someone in need, because individuals
who are more individualistic are less likely to engage in cooperative behavior (Wagner, 1995),
and because cooperative behavior tends to be stronger in collectivistic societies than in
individualistic ones (Marcus & Le, 2013). The results for altruistic behavior were also
significant. Participants who scored high on multicultural acceptance said they would donate
considerably more money and hours per week to help someone in need.

There were some limitations in the study. The condition to which participants were
exposed did not influence their decision to form relationships with members of an outgroup.
Priming strategies are used to activate one construct without the participant’s awareness of the
prime. Previous researchers have used American images and Chinese images to prime their
participants with either an individualistic (American) or collectivistic (Chinese) point of view
(Hong et al., 2000); however, in our study, no significant main effect of the priming strategies
used by the researchers was found. Nevertheless, there was a marginal effect of the interaction
between the multicultural prime and high multiculturalism, suggesting that those high in
multicultural acceptance who were also primed with multicultural images were slightly more
likely to be comfortable around those with diverse backgrounds compared to all other conditions.
As mentioned before, there was no main effect found for the primes used. Participants that were
exposed to the multicultural images did not differ from participants that were exposed to images
of American icons; the images did not affect their decision to donate both time and money to
someone in need.

One limitation of this study is that its sample size is relatively small and very limited. The
participants were undergraduate students from UCSB, which might have had an impact on the
study. For example, because it only consisted of college students, the sample may have been
more liberal. Also, as a result of the median split, participants who scored a six were rated low in
multiculturalism due to the generally high scores of participants on this scale, but in reality, scoring a six would mean that the participant has a fairly high acceptance of multiculturalism. The priming strategies used had no significant effect on any of the three dependent variables, possibly because the images presented in the priming conditions were misinterpreted by some of the participants as religious rather than cultural. The misinterpretations could be avoided in future research by making the priming images better representations of multiculturalism.

Lastly, further research on multiculturalism should be conducted to have a broader understanding of the concept of multiculturalism and its relation to diversity and altruistic behaviors. This research should also be done in both a more diverse country and a less diverse one to make a comparison between the two populations. Also, as noted in the previous paragraph, different priming strategies should be used so that the images more accurately represent multiculturalism, which might increase the possibility of obtaining significant results from the prime. Future research could explore the potential benefits of forming relationships with people of diverse, multicultural backgrounds. This research could be especially important considering our current situation in the United States, with the federal government focusing on making laws and policies that target immigrants and minorities. Research like this could have an impact on our society’s views and attitudes toward immigration.
Works Cited


