POSITIVE STEREOTYPING AND MULTICULTURAL AWARENESS: AN ONLINE EXPERIMENT

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ABSTRACT

We conducted an online experiment to investigate the effects of the nature of stereotypes (Positive or Negative; prepared as priming conditions) and multicultural awareness (measured using M-GUDS-S) on the subject's tendency of making stereotyped judgments on targets of different cultural/ethnic backgrounds. A total of 20 combinations of stimulus (positive/negative stereotyping word) and target (portrait of a male of different race) were presented, and the subject rated how well the stimulus and the target matched. We found a significant main effect of priming conditions on the subject's responses. We also found possible interactions between multicultural awareness subscales and the priming conditions.

INTRODUCTION

Stereotyping is a psychological categorization of specific social groups held by general public, which influences decision making and information processing tasks (Gaertner & McLaughlin 1983, Bodenhausen 1988, Greenwald & Banaji 1995). While potentially helpful for understanding unknown situations, things and other people, stereotypes we develop may not reflect reality or facts correctly (Biernat & Manis 1994, Kobrynowicz & Biernat 1997, Biernat & Fuegen 2001). It has been shown that stereotyping with negative images often leads to negative outcomes (Bargh, Chen, & Burrows 1996, Steele 1997, Shih, Pittinsky, & Ambady 1999). For

example, Steele (1997) showed African American students scored worse in an exam than European American students in the same condition, but that they actually scored better in an encouraging condition where prevailing stereotypes of their intellectual inferiority were removed.

What is relatively under-emphasized is the fact that positive stereotyping also may lead to negative outcomes (Kleinfeld 1975). One might think that positive admiring simply encourages and empowers people (Shih, Pittinsky, & Ambady 1999), as opposed to harming or stigmatizing resulting from negative stereotyping. In some cases, however, positive misunderstanding may negatively affect and hurt others. Cheryan & Bodenhausen (2000) showed positive stereotyping (e.g., Asians are generally good at mathematics) created unwanted pressure in Asian subjects and caused negative outcomes. Asian students who reported math performance was important for them were tested under three identity-salience conditions (ethnic identity, gender identity and personal identity). The result showed, although all subject groups were highly motivated, Asian Americans, when their ethnic identity was positively focused on, reduced their concentration and significantly impaired their performance in a math test.

Several possible reasons have been indicated in the literature for why people may be less aware of positive stereotypes than negative stereotypes in their judgments. One straightforward reason is that positive stereotypes may actually have positive effects on one's physical and mental conditions, as reported for increased longevity (Levy et al. 2002) and enhanced academic performance (Shih, Pittinsky, & Ambady 1999). It must be noted, however, that these studies only manipulated self-perceptions of subjects, but not necessarily social stereotypes imposed onto the subjects by others, which are the main focus of this article. Another possible, more historical reason is that positive stereotypes appeared and spread as a counteraction against negative stereotypes and therefore people tend to appreciate, rather than criticize, the positive stereotypes. For example, Kleinfeld (1975) described the cultural relativist in the classroom 'as "racist" … as the older type', pointing out the possibility that cultural relativism was just another extreme of race-based stereotyping that emerged during the societal change in the 1960's. More recently, Gawronski et al. (2008) showed experimentally that non-stereotypic association training is primarily driven by the affirmation of counter-stereotypes rather than by the negation of stereotypes. In either process described in these studies, the removal of negative stereotypes was set to be the main societal goal, which inevitably made people blind to potential harms caused by positive stereotypes. In addition, Kleinfeld (1975) also pointed out the educational roots of positive stereotypes, particularly in university-level training based on anthropological concepts that were inclined to associate individuals with traditional cultures (i.e., pre-made categories) too much.

Positive stereotyping can become particularly problematic in clinical fields where the importance of multicultural awareness and competency has already been acknowledged and emphasized, such as psychotherapy, mental health counseling and social work. Imagine a situation where a Black client with social anxiety visited a clinic and, just before the client expressed his problem, a counselor said Blacks were generally very social. While the client may feel unpleasant about this innocent stereotyping, he may notice the counselor's kindness and goodwill toward appreciating the client's ethnic heritage and attempt to make the session open and positive. In such a setting, it may be hard for the client to argue and correct the counselor's misunderstanding, and if the client did not show his displeasure, the counselor may not notice her unconscious stereotyping and develop wrong diagnoses or judgments (Abreu 1999).

To the best of our knowledge, little research has been conducted on the positive stereotyping made by people who are aware of multiculturalism, such as mental health professionals. We therefore examined the level of awareness of positive stereotyping among multiculturalism-aware people, in comparison to the level of awareness of negative stereotyping, and how people who unconsciously enact stereotyping express their misjudgments. Specific hypotheses we attempted to test were:

H1: People are generally more aware of negative stereotyping than positive stereotyping toward the targets from different cultures.

H2: There is a difference in the level of awareness of stereotyping between people who have good understanding of multicultural issues and people who do not have good understanding of multicultural issues.

METHOD

Participants

Anonymous subjects were invited to participate in this study mainly through two online psychological research communities, "*Psychological Research on the Net*" at Hanover College (http://psych.hanover.edu/research/exponnet.html) and "*Online Social Psychology Studies*" at the Social Psychology Network website (http://www.socialpsychology.org/expts.htm), from February 21st to June 21st, 2008. 126 subjects participated in this study, out of which 48 completed the entire experiment (completion rate: 38.1%). Two of them were excluded because of age (i.e., below 18). As a result, the responses of 46 subjects were used for the statistical analysis. Their demographics are summarized in Table 1.

Table 1: Demographics of experimental subjects.

Question	Response	Frequency (%)
Gender	Female	33 (71.7%)
	Male	13 (28.3%)
Age	18~19	12 (26.1%)
	20~29	23 (50.0%)
	30~39	5 (10.9%)
	40~49	3 (6.5%)
	50~59	1 (2.2%)
	60~	2 (4.3%)
Educational level	High school diploma/GED	2 (4.3%)
	Some college	25 (54.3%)
	College degree (4-year)	11 (23.9%)
	Master's degree	5 (10.9%)
	Doctoral degree	2 (4.3%)
	Other	1 (2.2%)
Race/ethnicity	White/European American	27 (58.7%)
	Black/African American	6 (13.0%)
	Asian/Pacific Islander	7 (15.2%)
	Latino/Hispanic	6 (13.0%)

Materials

The Short Form of the Miville-Guzman Universality-Diversity Scale (M-GUDS-S) (Miville et al. 1999, Fuertes et al. 2000) was used for the assessment of subjects' multicultural awareness. M-GUDS-S was designed to measure college students' attitudes, cognitions, and behaviors regarding diversity, using fifteen 6-point Likert Scale questions. The result is given in the form of total score and three subscales: Diversity of Contact, Relativistic Appreciation and Comfort with Differences. M-GUDS-S has been widely adopted by diversity researchers.

Three close-up color portraits were used as targets in the experiment: White, Black and Asian. The targets were all males in their 20's, with short hair, faint beard/mustache, and no glasses or accessories. The White and Black target photos were taken from the web database (Minear & Park 2004). The Asian target photo was purchased from dreamtime.com.

Eight positive stereotyping stimuli and eight negative stereotyping stimuli were prepared for each of the White, Black and Asian targets. Specifically, words that commonly appeared in the

relevant literature (Karlins et al. 1969, Devine 1986, Blair & Banaji 1996, Chang & Demyan 2007) were selected and used as stimuli. Fourteen neutral stimuli also were selected from (Devine 1986). The entire set of the stimuli is given in Appendix A.

Procedures

The experiment consisted of the following five parts.

The first part obtained informed consent, in which the subject was deceived into thinking that the purpose of this study was to examine the influence of personality on the information processing speed. This deception was implemented to reduce the Hawthorne effect on the subject's responses.

The second part was the assessment of the subject's awareness of and attitude toward multicultural issues using M-GUDS-S.

The third part was the additional questionnaire about demographic background of the subject, including questions about age, gender, educational level, and race/ethnicity.

The fourth part was the main part of the experiment. A stimulus word and target photo image were presented sequentially in the following pattern used by Blair & Banaji (1996): blank (500ms) -> stimulus (150ms) -> blank (200ms) -> target (540ms). Then the subject was asked to evaluate how well the word and the photo image matched each other in an 11-point Likert Scale. Races of targets were selected to ensure the ethnic background of the subject would be different from that of the target. Namely, White/European American, Latino/Hispanic, and other subjects were exposed to Black and Asian targets, Black/African American subjects were exposed to White and Asian targets, and Asian/Pacific Islander subjects were exposed to White and Black targets.

The subject was randomly assigned to one of the two priming conditions: Positive (8 positive and 2 neutral stimuli for each target) or Negative (8 negative and 2 neutral stimuli for each target). Given two targets, each subject went through 2 x (8 + 2) = 20 stimulus-target combinations, shuffled in a random order, preceded by 4 practice combinations with neutral stimuli at the beginning.

The fifth part was a debriefing, where the actual purpose of the study was disclosed and information about experimental materials was provided to the subject.

Experimental Setup

The entire experiment was established as a web-based online survey. For this purpose we used QuestionPro.com, an online survey development service, under the Student Research Sponsorship license that was available for student research with no charge for six months. The URLs of the developed survey are as follows:

Cover page of study: http://ac.marywood.edu/msayama/www/

Online experiment: http://www.questionpro.com/akira/TakeSurvey?id=856853

Informed consent, assessment, questionnaire and debriefing were implemented as normal questionnaire/text forms using QuestionPro's standard survey templates. The main experimental part, however, involved time-controlled presentations of target and word images. Since QuestionPro did not support such dynamic components, we wrote our own JavaScript codes and embedded them in each question page to realize time-controlled changes of images. All target photos and stimulus words were prepared as a 600x400-pixel JPEG bitmap image on a white background. Target photos were placed in a 300x400-pixel area at the center of the bitmap images. To reduce potential time delay for loading and displaying images over the Internet, all target and word images were pre-loaded and cached in the web browser at the beginning of the experiment while the subject was answering the assessment questions.

Races of the target images were automatically selected based on the subjects' answer to the question about their race/ethnicity. Priming conditions were randomly assigned to either Positive or Negative. These selection mechanisms of experimental conditions were implemented using QuestionPro's "branching" capabilities.

Additionally, we wrote another piece of JavaScript code and embedded it in every question page in the main experiment to prevent the subject from going back to previous pages using the web browser's "back" button. This mechanism guaranteed the subject would always go through the online experiment in the right order.

This study was reviewed and approved by the Department Review Board of the Department of Psychology at Marywood University.

RESULTS

Data collected through the online experiment consisted of four primary independent variables

and one dependent variable for each subject. Independent variables were three M-GUDS-S subscale scores (Diversity of Contact, Relativistic Appreciation and Comfort with Differences) and the priming condition (Positive or Negative; 1 and 0 were given as their numerical values, respectively, in regression analyses). The dependent variable was the subject's average answer to stimulus-target combinations in the main experiment (called Average Answer hereafter). Answers to combinations with neutral stimuli were excluded from the averaging. A greater Average Answer means that the subject considered the matching between the stimulus and the target stronger, indicating the subject's greater tendency toward (and therefore less awareness of) positive or negative stereotyping. In all of the following analyses, the significance level alpha = .05 was used.

We first conducted linear regression analysis to test the effects of the priming condition and the sum of the three M-GUDS-S subscale scores (called Multicultural Awareness hereafter) on the subject's tendency toward stereotyping (i.e., Average Answer). The results are shown in Table 2:

Table 2: Results of linear regression analysis. N = 46.

Variable	B	Std. Err.	t	p
(Constant)	6.847	1.316	5.204	< 0.00001
Priming Condition	1.747	0.396	4.409	< 0.0001
Multicultural Awareness	-0.015	0.018	-0.807	0.424

It was shown that subjects in the Positive priming condition were significantly more prone to making stereotyped judgments (M = 7.573, SD = 1.380 with Positive priming condition) than subjects in the Negative priming condition (M = 5.811, SD = 1.285 with Negative priming condition). This supports H1 that people are generally more aware of negative stereotyping than positive stereotyping toward targets from different cultures. In the meantime, there was no significant effect detected for Multicultural Awareness, therefore no direct support was obtained for H2 from this regression analysis.

To further explore possible effects of Multicultural Awareness, data were separated into two subsets using the priming condition (data with Positive stimuli only and data with Negative stimuli only) and conducted a linear regression analysis for each, with Multicultural Awareness being the only independent variable. The results are shown in Tables 3 and 4:

Table 3: Results of linear regression analysis of the data with Positive stimuli only. N = 24.

Variable	B	Std. Err.	T	p
(Constant)	7.665	2.060	3.720	< 0.01
Multicultural Awareness	-0.001	0.030	-0.045	0.964

Table 4: Results of linear regression analysis of the data with Negative stimuli only. N = 22.

Variable	B	Std. Err.	t	p
(Constant)	7.547	1.642	4.596	< 0.001
Multicultural Awareness	-0.025	0.023	-1.072	0.296

While neither data set produced a statistically significant correlation between Multicultural Awareness and the tendency of stereotyping, of note is that the effect of Multicultural Awareness was stronger for the data with Negative stimuli. This is in agreement with H2, implying that the subjects with high Multicultural Awareness may have been more careful about negative stereotyping than positive stereotyping. However, our current data are not sufficient to derive a statistically significant conclusion on H2.

Finally, we calculated Pearson correlation coefficients between the M-GUDS-S scores or its subscales and the Average Answer of the subjects, in the entire data set as well as the Positive and Negative subsets. The results are summarized in Table 5.

Table 5: Pearson correlation coefficients between independent variables and dependent variable (Average Answer).

Data set	Multicultural Awareness	Diversity of Contact	Relativistic Appreciation	Comfort with Differences
All (both Positive and Negative priming conditions)	-.127	-.088	+.029	-.214
Positive priming condition only	-.010	+.007	+.235	-.270
Negative priming condition only	-.233	-.135	-.077	-.299

These results offer interesting observations. The Diversity of Contact and Relativistic

Appreciation subscales showed some interactions with the priming conditions. Namely, the subjects with high Diversity of Contact scores may have made fewer stereotyped judgments than those with low Diversity of Contact scores only when the stimuli were Negative. In the meantime, the subjects with high Relativistic Appreciation scores may have made more stereotyped judgments than those with low Relativistic Appreciation scores only when the stimuli were Positive. These observations indicate that the Diversity of Contact and Relativistic Appreciation subscales may be worth further investigation. Additionally, the effect of the Comfort with Differences subscale on the average answer seemed robust and constant, with little interaction with the priming conditions.

DISCUSSION

We found a significant main effect of priming conditions indicating subjects in the Positive priming condition were more inclined to make stereotyped judgments than subjects in the Negative priming condition. This result can be understood in that people are less aware of the potential harms of positive stereotyping than those of negative stereotyping; therefore they may more easily make positively stereotyped judgments toward people from different cultures. This tendency was commonly observed for both subjects with high M-GUDS-S scores and subjects with low M-GUDS-S scores, indicating that, whether they have good understanding of multicultural issues or not, people easily express their "good" beliefs about others as stereotypes.

In our analyses no statistically significant effect was detected for Multicultural Awareness. However, when data were analyzed in more detail using M-GUDS-S subscales, some interactions between subscales and priming conditions were noticed. The Diversity of Contact subscale score seemed to have a negative effect on the average answer only under the Negative priming condition, while the Relativistic Appreciation subscale score seemed to have a positive effect on the average answer only under the Positive priming condition. In other words, Diversity of Contact may act to suppress negative stereotyping, while Relativistic Appreciation may act to promote positive stereotyping. To determine whether these are significant effects we would need more experimental data.

This study provides some key practical implications. First, it may help mental health professionals understand their inherent tendency to make and express positive stereotyping to their clients. This issue could be addressed in the educational materials for multicultural-centered practitioners (Sue et al. 1992). Also, our results suggest there should be special attention focused on the prevention of development of positive stereotypes when teaching diversity and multicultural issues in education in general. The current diversity education emphasizes the importance of recognizing and respecting differences between individuals with different

backgrounds, but this may promote positive stereotyping of different people as a byproduct. A seemingly positive effect of the Relativistic Appreciation subscale score on the average answer under the Positive priming condition implies that this may be the case. In the meantime, the robust negative effect of the Comfort with Differences subscale score on the average answer implies that materials related to this subscale may be more emphasized in the diversity education to prevent the development of both negative and positive stereotyping.

This study used an online survey as the experimental tool, which enabled participation from subjects with a wide variety of backgrounds from across the globe. Moreover, this is an efficient method of data collection and analysis, as all responses were stored in the survey server electronically. However, there were several limitations in our experiment. The use of the Internet for recruiting may have biased the demographics of the subjects. We used only two psychology related websites for recruiting subjects for this study, as such the demographic data indicated most of the participants were college students who had technical skills to use computers and the Internet (and who probably major in psychology). Moreover, the online experiment has a fundamental limitation in controlling experimental conditions. It is not possible to completely control the testing condition/environment through the Internet. Subjects may take this survey using different web browsers, on computers with different operating systems, in different times and/or in different room environments. To fully control the experimental condition, one should conduct the same experiment by inviting the subjects in person and letting them use a computer set up and maintained by the experimenter. Obviously there is a tradeoff between the controllability of experimental conditions in laboratory experiments and the availability of globally distributed subjects in online experiments.

Future research directions include the more detailed analysis of the effects of M-GUDS-S subscales on positive stereotyping, which would provide additional knowledge regarding what kind of multicultural attitudes may promote (or suppress) positive stereotyping. Another, probably more important, future direction is to study how positive stereotyping is received by clients in professional settings. This could be studied in both experiments and fieldwork, and would produce critical information about how mental health professionals should improve their conduct to make their practice most effective for clients coming from different cultural backgrounds.

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APPENDIX A

Stimuli used for each target.

Target	Type of Stereotyping	Stimuli
White	Positive	sociable, friendly, industrious, intelligent, athletic, active, success, ambitious
	Negative	arrogant, lazy, morally loose, violence, selfish, disobedient, compliant,

		privileged
Black	Positive	sociable, friendly, athletic, active, music, rhythmic, happy, sports
	Negative	poor, disobedient, aggressive, criminal, oppressive, hostile, troubled, low achieving
Asian	Positive	industrious, intelligent, reliable, courteous, academic success, moral, math, sophisticated
	Negative	compliant, introverted, shy, passive, isolated, obedient, quiet, timid
---	Neutral	water, long, number, what, many, something, between, said, another, always, then, would, about, television

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