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## **Documenting Nursing and Medical Students' Stereotypes about Hispanic and American Indian Patients**

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### **ABSTRACT**

**Objective:** Hispanic Americans and American Indians face significant health disparities compared with White Americans. Research suggests that stereotyping of minority patients by members of the medical community is an important antecedent of race and ethnicity-based health disparities. This work has primarily focused on physicians' perceptions, however, and little research has examined the stereotypes healthcare personnel associate with Hispanic and American Indian patients. The present study assesses: 1) the health-related stereotypes both nursing and medical students hold about Hispanic and American Indian patients, and 2) nursing and medical students' motivation to treat Hispanic and American Indian patients in an unbiased manner.

**Design:** Participants completed a questionnaire assessing their awareness of stereotypes that healthcare professionals associate with Hispanic and American Indian patients then completed measures of their motivation to treat Hispanics and American Indians in an unbiased manner.

**Results:** Despite being highly motivated to treat Hispanic and American Indian individuals fairly, the majority of participants reported awareness of stereotypes associating these patient groups with noncompliance, risky health behavior, and difficulty understanding and/or communicating health-related information.

**Conclusion:** This research provides direct evidence for negative health-related stereotypes associated with two understudied minority patient groups—Hispanics and American Indians—among both nursing and medical personnel.

**Keywords:** Health disparities, Hispanic patients, American Indian patients, Provider cognition

## INTRODUCTION

Hispanic Americans and American Indians face numerous health disparities compared with White Americans, including higher prevalence of obesity and diabetes (Barnes, Adams, & Powell-Griner, 2010; Centers for Disease Control and Prevention Health Disparities & Inequalities Report, 2013). In addition to genetic and socioeconomic factors that may contribute to racial and ethnic health disparities, recent research suggests that another important contributing factor is the differential healthcare that minority patients receive compared with Whites (Mead, Cartwright-Smith, Jones, Ramos, Woods, & Siegel, 2008). A better understanding of racial and ethnic health disparities requires examining the psychological processes that influence how healthcare providers evaluate, interact with, and treat minority patients.

In particular, negative health-related stereotypes about minority patient groups may be one factor that contributes to racial and ethnic disparities in healthcare (Burgess, van Ryn, Crowley-Matoka, & Malat, 2006). However, little is known about the specific stereotypes that healthcare personnel associate with Hispanic and American Indian patients. The present research addresses this gap in the current understanding of racial and ethnic health disparities by documenting the specific stereotypes members of the healthcare community associate with Hispanic and American Indian patients.

### *Stereotyping in healthcare*

Stereotypes are traits associated with a given social group that can become activated in perceivers' minds when they encounter, and subsequently categorize, members of that group. When activated, stereotypes can guide attention, judgment, memory, and behavior, which results in biased responding (Devine & Monteith, 1999; Fiske, 1998; Kunda & Spencer, 2003). Importantly, these effects occur even if perceivers do not personally endorse stereotypes as true; simply being aware of stereotypes can cause them to influence perception and behavior upon encountering members of the target group (e.g., Moskowitz, Stone, & Childs, 2011). For example, if a healthcare provider is aware of a stereotype associating a minority patient group with noncompliance, this stereotype can become activated in his or her mind upon encountering a member of the minority patient group. In turn, the activation of the stereotype will unknowingly lead to increased attention toward aspects of the patient's behavior that reflect noncompliance, which can then lead the perceiver to treat the patient as though he or she *is* noncompliant. Given the disparate care that Hispanics and American Indians receive compared with Whites, it is imperative that research documents the specific negative stereotypes that exist within the healthcare community that may influence the way providers perceive and treat them.

### *Stereotypes of Hispanic and American Indian patients*

Despite clear evidence that both Hispanic and American Indian patients suffer health disparities, a majority of research on race-based stereotyping in healthcare has focused on perceptions of African American patients (e.g., van Ryn & Burke, 2000). The only study to our knowledge that has examined directly negative stereotypes of Hispanics found that medical students expect Hispanic patients to be less compliant than White or Asian patients (Gregory, Wells, & Leake, 1987). Other studies, however, suggest that healthcare professionals may associate Hispanics with risky health behavior, such as unsafe sexual practices (Wiehe, Rosenman, Wang, & Fortenberry, 2010), and that physicians believe that difficulty communicating health-related information is an important barrier to treating Hispanics (Lipton, Losey, Giachello, Mendez, & Girotti, 1998). There is currently no published research that documents healthcare providers' stereotypes of American Indian patients. The present research

fills this void by directly measuring the stereotypes that healthcare providers associate with American Indian patients.

*Motivations to respond without prejudice*

Research indicates that when some individuals are motivated to behave in a non-biased manner towards members of racial and ethnic minority groups, they may make a concerted effort not to let cultural stereotypes guide their perceptions of or behavior toward members of minority groups (Plant & Devine, 1998). People can differ in their specific motivations to be non-prejudiced, however, and these motivations predict behavior during interactions with minority group members. Individuals who are *internally* motivated are driven by their personal morals and standards for egalitarian behavior, whereas individuals who are *externally* motivated wish to appear non-prejudiced for fear that they will be evaluated negatively by others due to cultural expectations for “politically correct” behavior. These motivations are relatively independent—people can be motivated by both internal and external goals, primarily motivated by one goal, or not motivated by either goal to behave in an unbiased manner. Whereas many healthcare personnel report low explicit prejudice toward minority patients (e.g., Burgess, van Ryn, Dovidio, & Saha, 2007), the present study will examine if individual differences in the internal and external motivations to control bias moderate the degree to which nursing and medical students are aware of negative stereotypes about Hispanic and American Indian patients.

*The present research*

This research was conducted in the Southwest United States, where healthcare personnel are likely to have frequent contact with Hispanic and American Indian patients and are likely aware of common stereotypes about these groups within the healthcare community. It was predicted that a majority of healthcare personnel surveyed would report awareness of negative stereotypes associating Hispanic patients with noncompliance, risky health behaviors, and difficulty communicating and/or understanding health-related information. Because no extant research has documented the stereotypes associated with American Indian patients, this aspect of the study was exploratory in nature.

The second goal of the present research was to explore how motivated healthcare personnel are to treat Hispanics and American Indians in an unbiased manner, as well as the specific sources of these motivations (internal versus external). Finally, we examined whether nursing and medical personnel differ in their beliefs about and motivations to respond without prejudice toward Hispanics and American Indians. An important limitation to extant research on perceptions of minority patient groups is that, despite the integral role that nurses play in caring for minority patients, studies have focused almost exclusively on physicians’ (or medical students’) perceptions.

## **METHODS**

Medical and nursing students at a university campus in the Southwest United States were contacted via email and asked to participate in an anonymous study about impressions of different patients. The 20 medical and 20 nursing students ( $M_{age}=25.6$  years) who elected to participate received a link to an online survey. After providing consent, participants completed a measure assessing their awareness of stereotypes healthcare personnel typically associate with Hispanics, followed by a measure of their internal and external motivations to respond without prejudice toward Hispanics. Participants then completed the same measures in relation to American Indians. Finally, participants provided demographic information and were debriefed. They were later sent \$10 for their participation.

### Research instruments

#### *Stereotypes typically associated with Hispanic and American Indian patients*

The instructions asked participants to, “list any behaviors that you believe healthcare professionals in America associate with Hispanics/Native Americans more than with other groups. These associations can include behaviors that healthcare professionals think Hispanics/Native Americans are especially likely to perform or unlikely to perform.”<sup>1</sup> Participants were provided with a space in which to type their responses. Next, participants were provided with a list of eight health-related behaviors and attributes and asked to select all of the items that represent common perceptions of Hispanic/Native American patients within the healthcare community. Of the eight items, two related to health risk (More likely to smoke; Less likely to smoke), three related to noncompliance (Noncompliant; Stubborn; Less likely to follow some types of prescribed cancer related behavioral modification, like smoking cessation), and three related to communication barriers (Less able to understand healthcare advice; Able to understand advice on how to quit smoking; Able to understand recommendations for altering behavior that can reduce the risk of cancer).

#### *Internal and external motivation to respond without prejudice*

A 10-item scale assessed participants’ motivation to behave in a non-prejudiced way towards Hispanics/American Indians for internal reasons (e.g., “I attempt to appear non-prejudiced toward Hispanic people because it is personally important to me”) and external reasons (e.g., “Because of today’s politically correct standards, I try to appear non-prejudiced toward Hispanic people”; Plant & Devine, 1998). Participants used 5-point Likert scales to rate the degree to which they agree with each statement (1=*Strongly Disagree*, 5=*Strongly Agree*). Ratings were averaged for internal motivation (IM) and external motivation (EM) questions separately, and higher scores indicate higher levels of IM/EM.

#### Statistical analyses

Due to a large proportion of female (85%) and White (80%) participants, participant gender and race were not included in the analyses.

#### Awareness of stereotypes

In all cases, separate analyses were conducted for responses regarding Hispanic and American Indian patients. Two research assistants, blind to the study’s goals, coded whether each participant’s open-ended responses included content related to noncompliance, health risk, and communication barriers. Three other concepts were also common among participants’ responses and were coded for descriptive purposes: family involvement in healthcare, spiritual or cultural factors, and distrust in healthcare providers. Inter-rater reliability was high for each of the categories (average  $K=.77$ ,  $p's<.001$ ), and the first author resolved any disagreements. See *Table 1* for example responses.

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<sup>1</sup> The term Native American was used for the materials because it is the more familiar term to this participant sample.

Table 1. Example responses for coded stereotypes.

<b>Stereotype</b>	<b>Example Response</b>
Health risk	<i>“Eat high caloric foods and not exercise on a regular basis”</i>
Noncompliance	<i>“In general, more non-compliant than other groups”</i>
Communication barriers	<i>“Difficulty understanding and following healthcare plan due to language barriers”</i>
Family involvement	<i>“Many have family support”</i>
Spiritual/cultural factors	<i>“More use of herbal remedies, more likely to be religious”</i>
Distrust in healthcare providers	<i>“Less trusting of medical profession in general”</i>

Each participant’s responses across the open-ended and item-selection components of the questionnaire then were coded in order to assess the proportion of nursing and medical students who reported awareness of noncompliance, health risk, and communication barrier stereotypes. Participants were coded as being aware of a stereotype if they listed the stereotype in the open-ended portion of the study, endorsed one of the negative stereotype-related items on the item-selection portion of the questionnaire, or did not endorse one of the items associated with positive health behaviors, like “Less likely to smoke.” The same was done for noncompliance and communication barrier associations.

Cochran’s Q tests were used to test for overall differences in the frequency with which participants reported awareness of noncompliance, health risk, and communication barrier stereotypes. McNemar’s tests were used for follow-up pair-wise comparisons. Fisher’s exact tests were used to compare the proportion of nursing and medical students who reported awareness of each stereotype.

#### *Motivations to respond without prejudice*

Due to a computer error, one item from the IM component of the scale was not collected for American Indians, but the 4-item IM subset available reached commonly accepted levels of reliability ( $\alpha=.84$ ).

Mixed-model ANOVAs were used to examine the 2 (Student program: Medical vs. Nursing) x 2 (Motivation: Internal vs. External) design for participants’ responses. Logistic regressions with an IM (continuous) X EM (continuous) design were used to examine whether IM, EM, or an interaction between the two predicted stereotype awareness.

## **RESULTS**

### Awareness of stereotypes

#### *Noncompliance, health risk, and communication barrier stereotypes*

Associations with Hispanic patients: The results revealed significant differences in the proportion of participants who reported awareness of each stereotype,  $Q=16.6$ ,  $p<.001$  (Table 2). Whereas there was no difference in the frequency with which participants reported awareness of stereotypes about health risk (95%) and communication barriers (92.5%),  $p=1.0$ , participants were significantly more likely to report awareness of stereotypes about health risk and communication barriers than stereotypes about noncompliance (65%),  $\chi^2=7.56$ ,  $p=.004$ ,  $\chi^2=9.09$ ,  $p=.001$ , respectively.

Associations with American Indian patients: The results also revealed significant differences in participants’ reported awareness of each stereotype for American Indian patients,  $Q=10.2$ ,  $p=.006$  (Table 2). Participants were significantly more likely to report awareness of the

health risk stereotype (100%) than they were to report awareness of the communication barrier stereotype (77.5%),  $\chi^2=7.11, p=.004$ , and they were marginally more likely to report awareness of the health risk stereotype than the noncompliance stereotype (87.5%),  $\chi^2=3.20, p=.06$ . There was no difference in participants' awareness of noncompliance and communication barrier stereotypes for American Indian patients,  $\chi^2=.90, p=.34$ .

Other coded stereotypes

Regarding Hispanic patients, almost one quarter (23.7%) of participants listed stereotypes related to family involvement in healthcare, and 15.8% listed stereotypes to spiritual/cultural factors. Twenty percent of participants listed stereotypes related to spiritual/cultural factors and 14.3% listed stereotypes related to distrust in healthcare providers regarding American Indian patients.

Differences between nursing and medical students

Nursing students (100%) were significantly more likely than medical students (75%) to report awareness of the stereotype that American Indian patients are noncompliant,  $\chi^2=5.71, p=.05$  (Table 2). No other comparisons between nursing and medical students reached statistical significance,  $\chi^2$ 's<3.58,  $p$ 's>.12.

Table 2. Percent of nursing and medical students who reported awareness of stereotypes about Hispanic and American Indian Patients.

Stereotype	Stereotypes about Hispanic Patients		Stereotypes about American Indian Patients	
	Nursing Students	Medical Students	Nursing Students	Medical Students
	% Aware (n)	% Aware (n)	% Aware (n)	% Aware (n)
Health risk	100.0 (20)	90.0 (20)	100.0 (20)	100.0 (20)
Noncompliance	75.0 (20)	55.0 (20)	100.0 (20)	75.0 (20)
Communication barriers	100.0 (20)	85.0 (20)	90.0 (20)	65.0 (20)
Family involvement	30.0 (20)	16.7 (18)	11.1 (18)	0.0 (17)
Spiritual/cultural factors	15.0 (20)	16.7 (18)	27.8 (18)	11.8 (17)
Distrust in healthcare providers	5.0 (20)	0.0 (18)	16.7 (18)	11.8 (17)

Motivations to respond without prejudice

Analyses of participants' motivations to respond without prejudice toward Hispanics revealed a main effect of motivation type—participants were significantly more internally motivated ( $M=4.05, SD=.79$ ) than they were externally motivated ( $M=3.15, SD=.73$ ),  $F(1,38)=23.6, p<.001$ . Neither the main effect of student program nor the interaction between motivation type and program were statistically significant,  $F$ 's<2.82,  $p$ 's>.10.

Similarly, participants were significantly more internally motivated to respond without prejudice toward American Indians ( $M=4.10, SD=.74$ ) than they were externally motivated ( $M=3.06, SD=.84$ ),  $F(1,38)=28.1, p<.001$ . Again, neither the main effect of student program nor the interaction between motivation type and program were significant,  $F$ 's<1.43,  $p$ 's $\geq$ .24.

The results revealed no relationships between internal motivation to control prejudice, external motivation to control prejudice, or the interaction between the two goals and awareness of stereotypes,  $p$ 's $\geq$ .06.

## **DISCUSSION**

### Common perceptions of Hispanic and American Indian patients

The results of this study indicate that the majority of both nursing and medical students surveyed associated Hispanic and American Indian patients with noncompliance, risky health behavior, and barriers to effectively communicating health-related information. In addition, whereas the participant sample associated Hispanic patients with family involvement in healthcare and spiritual/cultural factors, they associated American Indian patients with spiritual/cultural factors and distrust of healthcare providers. Thus, most of the medical and nursing personnel ascribed similar stereotypes to each minority group, but they also identified cultural stereotypes that were unique to each group.

Given that both nursing and medical personnel are exposed to the same cultural stereotypes within the healthcare community, it is not surprising that there is substantial overlap between the stereotypes that nursing and medical students associate with Hispanic and American Indian patients. One important difference did emerge between the perceptions of nursing and medical students, however—nursing students were more likely than were medical students to report awareness of the negative stereotype that American Indian patients are noncompliant. In this case, it may be that nursing personnel are more likely to be involved in the types of care (e.g., lifestyle change coaching) that most closely relate to the behavioral compliance of American Indian patients.

### Motivations to respond without prejudice

The results also provided encouraging evidence that both nursing and medical students are more motivated by internal, compared with external, reasons to respond without prejudice toward Hispanics and American Indians. However, participants' motivations to respond without prejudice did not moderate awareness of explicit negative stereotypes, providing further evidence that awareness of negative group-based stereotypes can occur even if individuals are motivated to treat members of a minority group in an unbiased manner. The dissociation between personal goals and awareness of stereotypes found in the present research is important given psychological research suggesting that stereotypes can be activated nonconsciously in perceivers' minds when out-group members are encountered, even if perceivers are explicitly motivated to behave in a non-prejudiced manner (Devine & Monteith, 1999).

When stereotypes become activated implicitly, they are mentally accessible, yet outside of conscious awareness, and they can guide how minority individuals are initially attended to, what facts about them receive perceivers' attention, and how perceivers evaluate their words and deeds, without perceivers' awareness that this process has even occurred (Sekaquaptewa, Espinoza, Thompson, Vargas, & von Hippel, 2003). Thus, stereotypes associating Hispanic and American Indian patients with noncompliance, health risk, and communication barriers may still affect the way that nursing and medical personnel interact with and treat individual patients, even if they are consciously motivated to treat minority patients fairly. Indeed, a recent study found that nursing and medical personnel exhibit implicit activation of stereotypes about Hispanic patients, despite being highly internally motivated to treat Hispanics fairly (Bean, Stone, Moskowitz, Badger, & Focella, 2013).

### Implications for cultural competency training

Targeting factors that contribute to the development of stereotypes can help guide interventions aimed at enhancing the care of minority patients. Stereotypes about Hispanics and

American Indians may stem, in part, from the cultural competency training that nursing and medical students receive. The goal of cultural competence training is to educate students about diversity and how to consciously control explicit biases during interactions with minority patients, but it may have an unintended effect of increasing the likelihood that minority patients will be classified by race or ethnicity, activating stereotypes that can “leak” into the decisions made by healthcare providers. Cultural competency training should also teach students about the ways that implicit stereotyping can affect their perceptions and treatment of minority patients and provide them with strategies for controlling unconscious stereotypes (Stone & Moskowitz, 2011).

#### Limitations & future directions

There are some important limitations to the scope of the present research that should be addressed by future studies. First, research should examine whether awareness of stereotypes differs as a function of healthcare professionals’ gender or race. Another important extension of the present research is to examine whether similar patterns of stereotype awareness and motivations to respond without prejudice are found among practicing physicians and nurses. It may be that nurses and physicians who have been working for an extended period of time have had many more interactions with Hispanic and American Indian patients that could bolster or disconfirm group-based stereotypes.

#### **CONCLUSION**

The present work provides important insight into the stereotypes that healthcare personnel associate with two minority patient groups that face health disparities compared with White Americans—Hispanics and American Indians. Despite their motivations to treat Hispanic and American Indian patients in an unbiased manner, nursing and medical personnel report awareness of widespread cultural stereotypes within the healthcare community regarding noncompliance, health risk, and communication barriers that may influence their perception and treatment of individual patients.

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