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# Medical Mistrust across Different Ethnic Groups

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MEDICAL MISTRUST ACROSS DIFFERENT ETHNIC GROUPS

**MEDICAL MISTRUST ACROSS DIFFERENT ETHNIC  
GROUPS**

**Honors Thesis**

**Presented in Partial Fulfillment of the Requirements  
For the Degree of Bachelors of Science in Psychology**

In the College of Arts and Sciences at Salem State University

By

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Faculty Advisor  
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Commonwealth Honors Program  
Salem State University  
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**Abstract**

This study explores various factors that contribute to medical mistrust among a population of college students from a medium sized, public university. The hypothesis of the study was that ethnic minority status would be related to high levels of medical mistrust. This was tested using a self-authored instrument, which was made available to participants online. Participants were asked to rate various statements pertaining to medical mistrust (i.e. “I feel a high amount of anxiety when going to see a doctor” on a Likert scale, ranging from 1 to 7, 1 indicating that the participant strongly agreed and a 7 indicating strongly disagreed with the statement. Results were analyzed using statistical tests such as independent samples t-tests, one-way analyses of variance, and a factor analysis. While a relationship was not found between ethnicity and medical mistrust, other factors such as gender, age, citizenship status, socio-economic status, and birth country were found to be related to medical mistrust.

*Keywords:* medical mistrust, race, ethnicity, minority, health care, attitude

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### Medical Mistrust across Different Ethnic Groups

According to the 2014 Commonwealth Fund Report, the United States ranked worst of 11 wealthy nations in terms of the “efficiency, equity, and outcomes” of its health care system (Commonwealth Fund). Despite this data that suggests major flaws in the system, the appraisal of the health care system by the American public is inconsistent. While some research suggests there is a medical mistrust among certain minority groups, other research claims there is no difference in health care experience among minorities and non-minorities. The purpose of this study is to assess views of the American health care system across different ethnic groups.

There are several studies that highlight the health care and health status disparities of African-Americans as compared to mainstream whites. In 2010, Perry, Chien, Walker, Fisher, and Johnson conducted a study that focused on the disproportionately high rates of morbidity and mortality among African American male adolescents. Results of the survey concluded that members of this group were “...unable to engage effectively with existing resources, therefore yielding lower primary care visits” (p. 317). In addition, 10% of participants reported feeling unable to trust doctors. Another study focusing on African-American health care status was conducted by Scharff, Mathews, Jackson, Hoffsuemmer, Emeobong, and Edwards in 2010 and explored reasons why African-Americans remain underrepresented in medical research. This study found that while the majority of participants recognized the value of medical research, mistrust of the healthcare system prevented them from participating. During interviews, participants reported being wary of monetary incentives to participate in research, and viewed medical research as only benefitting whites. Participants also reported medical information is often presented in a way that they cannot understand. In conclusion, these studies support a

communication barrier between health care professionals and minority patients, which appears tied to negative views of the health care system among African Americans.

Physicians across many medical specialties report a communication barrier when relating medical information to patients of different cultural backgrounds. In a 2015 study conducted at Stanford Hospital, 1032 of 1040 doctors reported “quite a bit of trouble” when discussing end-of-life procedures with diverse patients. In an online survey, doctors were asked to list the top barriers faced. Results of the survey showed that mistrust of the health care system was among the top six barriers. Other barriers included were: language, religious beliefs, belief that the doctor is ignorant, cultural differences in decision making (i.e. men making decisions for women), health literacy levels, and mistrust of the health care system (Periyakoli, Neri, Kraemer, 2015). Similar to the previous studies, which focused on African American health disparities, the Stanford study also found there exists a communication barrier between health professionals and patients of numerous ethnic minorities.

While some literature suggests a pervasive mistrust among minority groups, even among studies that suggest a more positive view of the American health care system by minorities there are negative views present. For example, a 2012 study focused on health disparities between Iranians in Iran and Iranians who immigrated to the United States. Iranian immigrants had poorer overall health when compared to their counterparts in their homeland (Martin, 2012). While Iranian immigrants expressed positive attitudes toward treatment of physical ailments by the American health care system, they reported feeling that doctors were distant, did not ask about obstacles in adapting to the United States, and lacked understanding of their inner turmoil (Martin, 2012). Despite being able to afford health care, there are hidden obstacles, such as lack of doctor-patient trust, that affect quality of care for this group.

Roman, Griswold, Smith, and Servoss in 2008 found no difference between minority and non-minority groups in the views of the American health care system. This study surveyed participants in an emergency psychiatric care center. Results showed no difference in perceptions of health care providers. Both groups reported both positive and negative views of the health care system (Roman et al., 2015). This study negates previous studies, which suggest a significant difference in quality of care for minority groups.

While many of the previously discussed studies focused on adult views of the American health care system, there still remains a question as to whether these views are present in younger minority consumers of American health care. In a 2014 study, Smith, Chesin, and Jeglic conducted a study that examined how frequently minority college students made use of on-campus health resources as compared to mainstream white students. The results showed that while minority college students experienced higher rates of depression they were less likely to use mental health resources provided by the institution (Smith et al., 2014). These findings support the idea that even at the beginning of adulthood problems exist in the interaction between minorities and the health care system. It is unclear whether the less frequent usage of health care resources was related to negative views of the health care system. The question remains as to whether the medical mistrust reported by adult minorities is shared by younger college aged consumers.

There are conflicting results among past studies on health care disparities among minority groups. The goal of this study is to determine if medical mistrust exists among a population of college students. Secondly, this study will explore whether this mistrust belongs to specific ethnic groups or varies between individuals. Lastly, this study will examine if there are recurrent factors that will explore possible correlates of medical mistrust.

### **Hypothesis**

Based on past research exploring medical mistrust, this study predicts that medical mistrust will be higher among ethnic minorities compared with white students on a college campus.

### **Method**

#### **Participants**

Fifty-four students from a moderate size university voluntarily participated in an online survey. Informed consent was obtained from all participants. Students were recruited via the university's online database for psychological research.

#### **Measures**

Participants answered questions in an original online survey hosted by *Survey Monkey*. In the beginning of the survey, participants answered demographical questions, which collected data such as age, gender, race, and social class. For the remainder of the survey, participants rated various statements pertaining to the level of trust concerning various aspects of the medical field. For example, one statement from the survey is "I feel a high amount of anxiety when going to see a doctor." These statements were supplied from a self-authored instrument.

#### **Procedures**

Participants began the survey by clicking the link on the university's online research website. This link brought them to the survey, on *Survey Monkey*. After confirming that they were at least eighteen years old and currently attended the university, participants were brought to a page containing demographical questions. Once those questions were completed, participants were shown the statements, which they rated on a Likert scale. The Likert scale ranged from 1-7 where a "1" indicated strongly agreeing with the statement and a 7 indicated strongly disagreeing with the statement. See Appendix for the complete list of statements.



**Results**

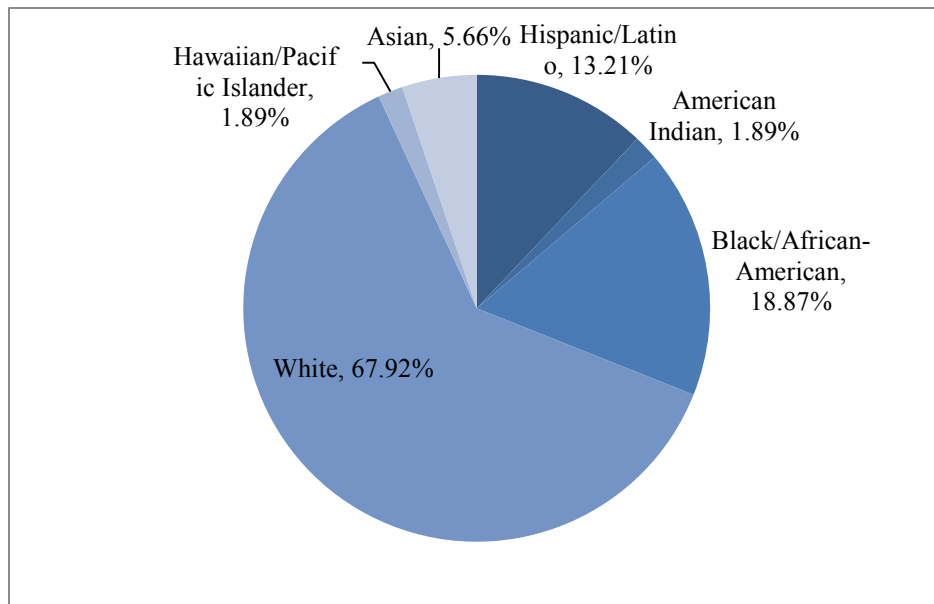
Statistical analyses were performed on the data and reported in the following order: results related to participant variables and then a factor analysis of the survey items.

**Participant Demographics**

**Race.** The self-identified race of participants is shown in Figure 1. Approximately 70% of participants identified as white, and roughly 30% belonged to minority groups. Contrary to the hypothesis, no significant differences were found when comparing answers to survey among white participants and non-white participants.

**Figure 1.**

**Self-Reported Race among Participants**



**Gender.** A two-sample t-test was performed to compare male and female participants' scores on items in the survey, where the alpha level was set at  $p < 0.05$ . Seven participants were male and 47 were female. Significant gender differences were found for two items, see Table 1. Males reported being more likely to withhold information from doctors to avoid

judgment when compared with females. Females, compared to males, reported a stronger belief that the body can heal itself.

**Table 1.**  
**Independent Samples t-Test: Gender Differences in Item Ratings**

Item	Mean Score		Significance <i>p</i>	t value (df)
	Males <i>M (SD)</i>	Females <i>M (SD)</i>		
I often withhold information from doctors to avoid judgment.	2.29 (0.951)	3.85 (1.719)	0.003	-3.571 (12.862)
I believe my body can heal itself and that going to see a doctor is not necessary.	5.86 (1.069)	4.87 (1.240)	0.054	2.227 (8.661)

**Citizenship status.** A two-sample t-test was performed to compare scores of participants with at least one parent born in the United States with participants who are first generation Americans, where the alpha level was set at  $p = < 0.05$ . Thirty-seven participants had at least one parent who was born in the United States. Seventeen participants were first generation American citizens. A Significant difference was found for belief in doctor’s intelligence, see Table 2. Participants with at least one U.S. born parent felt that, compared with themselves, doctors are more intelligent. Participants who were first generation American citizens disagreed with the statement that doctors are more intelligent.

**Table 2.**  
**Independent Samples t-Test: Citizenship Status Differences in Item Ratings**

Item	Mean Score		Significance <i>p</i>	t value (df)
	1+ parent born in the U.S. <i>M (SD)</i>	First generation <i>M (SD)</i>		
I feel that doctors are much more intelligent than I.	4.89 (1.524)	3.73 (1.191)	0.015	2.660 (20.737)

**Birth country.** A two-sample t-test was performed to compare scores of participants born in the United States to those born outside of the country, where the alpha level was set at  $p < 0.05$ . Forty-one participants were born in the United States and thirteen were born outside of the country. Significant differences were found for three items, see Table 3. Participants born in the United States were less likely to withhold information from doctors, compared with participants born outside of the United States. Participants born in the U.S. were more likely to believe disorders are over-treated by doctors as a way to make money. Participants born in the United States reported feeling more strongly that the health care system is fair compared with participants born outside of the U.S.

**Table 3.**

**Independent Samples t-Test: Birth Country Differences in Item Ratings**

Item	Mean Score		Significance <i>p</i>	t value (df)
	U.S. <i>M (SD)</i>	Non-U.S. <i>M (SD)</i>		
I often withhold information from doctors to avoid judgment.	3.90 (1.685)	2.85 (1.625)	0.056	2.024 (20.852)
I believe certain disorders are over-treated by doctors as a way to make money.	4.88 (1.713)	3.77 (1.691)	0.054	2.042 (20.629)
I believe the health care system is fair.	4.98 (1.476)	3.92 (1.498)	0.039	2.208 (20.153)

**Age.** A one-way analysis of variance was performed to compare participants belonging to different age groups, where alpha level was set at  $p < 0.05$ . Significant differences were found for three items, see Table 4. Participants aged 18-24 years old ( $n = 40$ ) reported understanding information doctors present less often than individuals aged 25-29 ( $n = 6$ ) and individuals 30 years old and older ( $n = 8$ ). Individuals aged 30 and older strongly agreed that doctors are everyday people who work hard whereas individuals aged 18-24 and 25-29 only moderately agreed with the statement. Individuals aged 30 years old and older felt strongly that doctors rush

through appointments whereas individuals aged 18-24 and 25-29 felt neutrally about the statement.

**Table 4.**  
**ANOVA: Age Differences in Item Ratings**

Item	Mean Score			Significance <i>p</i>	f value (df)
	18-24 yrs.	25-29 yrs.	30+ yrs.		
I always understand the information a doctor presents to me.	3.125	2.50	2.17	0.038	3.496 (2)
I believe doctors are everyday people that work hard and are good at what they do.	2.80	2.33	1.67	0.012	4.799 (2)
I feel doctors often rush through appointments.	4.5	4.67	5.83	0.035	3.572 (2)

**Major.** A one-way analysis of variance was performed to compare participants belonging to different majors, where alpha level was set at  $p = < 0.05$ . Thirty-four participants were psychology majors. Six were social work majors. Four were nursing majors. The remaining participants' majors (10) were combined into the category labeled "other." Significant differences were found for four items, see Table 5. While psychology, social work, and nursing majors strongly agreed that they would be willing to participate in medical research, participants in other majors felt closer to neutral toward the statement. While nursing majors agreed that doctors are primarily motivated by money, social work majors reported feeling neutrally, and psychology majors disagreed with the statement. Social work and psychology majors did not report feeling that doctors rush through appointments. Participants majoring in nursing and other majors agreed to feeling that doctors rush.

**Table 5.**

**ANOVA: Field of Study Differences in Item Ratings**

Item	Mean Score				Significance <i>p</i>	f value (df)
	Psychology	Social Work	Nursing	Other		
I would be willing to participate in medical research.	2.68	2.67	2.50	3.13	0.024	3.417 (3)
I feel doctors are primarily motivated by money.	3.85	4.00	5.00	3.00	0.044	2.904 (3)
I believe the health care system is fair.	5.09	3.00	5.25	3.88	0.009	4.328 (3)
I feel doctors often rush through appoints.	5.11	5.00	3.50	3.50	0.002	5.933 (3)

**Socio-economic status.** An analysis of variance was performed to compare participants belonging to different socio-economic groups, where alpha level was set at  $p = < 0.05$ . Significant differences were found for two items, see Table 6. While most participants felt neutrally toward past negative experiences with doctors, participants belonging to the \$100,000+ household group ( $n = 6$ ) strongly agreed to having had a negative experience with a doctor in the past. Participants belonging to the \$26,000 to \$50,000 household group ( $n = 15$ ) agreed to feeling disorders are over treated by doctors. Participants in the \$100,000+ strongly agreed that disorders are over treated. Participants in other groups felt neutrally.

**Table 6.**

**ANOVA: Socio-economic Status Differences in Item Ratings**

Item	Mean Scores					Significance <i>p</i>	f value (df)
	\$0-25k	\$26-50k	\$51-75k	\$76-100k	> \$100k		
I have had a negative experience with a doctor in the past.	4.55	3.53	4.26	4.16	6.20	0.035	2.814 (4)
I believe certain disorders are over-treated by doctors as a way to make money.	4.10	5.00	4.20	4.84	5.8	0.021	3.189 (4)

**Factor analysis.** A factor analysis was performed on all Likert scale items in the survey. Four components accounted for the variance in the survey. Component 1 accounted for 22%, component 2 for 9%, component 3 for 7%, and component 4 for 7% of the total variance, see Table 8. Component 1 shows that the statements “I feel I can tell a doctor anything” and “I feel doctors are qualified to treat my illnesses” predict scores for the remaining items on the survey. Component 2 shows that participants who did not find medical research beneficial also reported feeling unable to distinguish between different types of health care providers. Component 3 shows that participants who answered that they felt doctors are much more intelligent than they are tended to feel the right to decline treatment. Component 4 shows that participants for whom language has been a barrier when speaking with doctors also tended to feel that doctors do not genuinely care, see table 9.

**Table 8.**  
**Factor Analysis: Components and Percent of Variance**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.760	22.534	22.534	6.760	22.534	22.534
2	2.721	9.068	31.602	2.721	9.068	31.602
3	2.313	7.709	39.311	2.313	7.709	39.311
4	2.146	7.152	46.463	2.146	7.152	46.463

**Table 9.**  
**Component Matrix: Relationships between Items**

Item	Component			
	1	2	3	4
During a visit with a doctor, I feel I can tell him/her anything.	.711	-.001	.279	-.228
I feel a high amount of anxiety when going to see the doctor.	.239	-.100	.347	.387
I feel most doctors have their patients’ best interests in mind.	.663	.035	-.236	.112

I feel most doctors are qualified to treat my illnesses.	.765	.031	-.199	.145
I trust nurses and doctors equally.	.601	.053	-.335	.243
Language has been a barrier when speaking with a doctor.	.343	-.161	-.196	.532
I always understand the information a doctor presents to me.	.483	-.422	.038	.249
During a visit with a doctor, I feel I have a choice to decline treatment.	.414	-.122	.626	-.318
I often want a second opinion for a suggested treatment.	.455	.133	.195	-.022
I generally view the doctor's office as a positive environment.	.637	-.154	.473	-.083
I can distinguish the different types of medical professionals who provide primary care.	.520	-.505	.041	.059
I understand what tests will be performed when my blood is drawn.	.399	-.377	.196	-.269
I am confident that the blood will only be used for my benefit.	.599	-.324	-.248	-.328
I would be willing to participate in medical research.	.319	-.148	-.222	-.183
I feel that medical research is beneficial.	.543	-.428	-.308	-.284
I often withhold information from doctors to avoid judgment.	.293	.005	.464	.338
I have had a negative experience with a doctor in the past.	.569	.440	.162	.155
One or more of my parents had had a negative experience with a doctor in the past.	.312	.583	.093	.074
I feel that doctors are much more intelligent than I.	-.259	-.387	.498	.268
I feel that doctors are primarily motivated by money.	.291	.485	-.030	.155
I am confident the information I tell a doctor will not be repeated to anyone else.	.670	.226	.074	-.034
I believe my body can heal itself and that going to see a doctor is not always necessary.	-.410	.340	-.089	-.470
I believe certain disorders are over treated by doctors as a way to make money.	.286	.459	-.251	.409
I believe doctors are everyday people that work hard and are good at what they do.	.488	.227	-.177	-.312
Before choosing a doctor, I research his/her past successes/failures.	.126	.047	-.086	.279
I believe the health care system is fair.	.318	.396	.254	-.161
I feel doctors talk down to me when explaining medical information.	.520	.150	-.017	.000
I believe doctors genuinely care about their patients.	.563	.205	-.148	-.483
I feel doctors often rush through appointments.	.051	.349	.421	-.031
I believe it is important for people to have an annual physical exam.	.437	-.214	-.301	.192

**Discussion**

The main hypothesis was not supported by the statistical analyses of participants' responses; nevertheless, other data collected demonstrate that other factors may have an equal or greater influence on medical mistrust than race. Factors such as gender, age, socio-economic

status, and citizenship status were related to medical mistrust rather than race. While race did not present as a major influence on medical mistrust in this study, race may be a factor that was not properly measured by the instrument used in this experiment. Future research could benefit from the factors discovered in this study, as well as eliminating some of the errors made.

Regarding gender, there were some interesting differences between male and female participants' responses. For example, males were more likely to withhold information from doctors to avoid judgment. This could be attributed to the social expectation that men are less willing to talk about their feelings, and are less open about any perceived weaknesses in physical health. Another difference found was that females were more likely to report a strong belief that the body can heal itself. This also could be attributed to the stereotype that women are more intuitive and better connected to their feelings.

The study also highlighted differences in medical mistrust among age groups. Items influenced by age included: understanding information a doctor presents, believing doctors are everyday people who work hard, and feeling doctors rush through appointments. The data analysis illuminated trends within the three age groups. The first trend was that older participants tended to feel strongly that they understood information presented by doctors and reported feeling more strongly that doctors rush through appointments. It is likely older participants have more experience, education, and capacity for understanding information than younger participants. In addition, older participants may have experienced doctors rushing more often than younger participants by virtue of having a higher number of interactions with doctors over the course of a lifetime.

Differences also existed among participants of different socio-economic classes. Participants belonging to households with incomes ranging from \$26,000 to \$50,000 reported



feeling more strongly, when compared with participants in other socio-economic brackets, that disorders are over treated by doctors to make money. In addition, participants belonging to households with incomes over \$100,000 reported strong agreement with having had a negative experience with a doctor in the past. Perhaps individuals belonging to higher social classes frequent the doctor's office more regularly and thus increase the chance of a negative encounter.

There were also differences among groups that suggested culture, as opposed to the original hypothesis, which focused on race, is a major influence on medical mistrust. For example, there were differences not only among participants born in the United States versus born in other countries, but also in participants who have at least 1 parent born in the United States versus participants' with neither parent born in the United States. For example, participants born in the United States were more likely to believe that the health care system is fair. Not only did those not born in the United States not share this sentiment, but these participants felt certain disorders are over treated by doctors as a way to make money. These contrasting viewpoints suggest that the core beliefs an individual has developed throughout his/her lifetime have a major impact on medical mistrust. Similarly, participants with at least one parent born in the United States, when compared with themselves, felt that doctors are more intelligent. On the contrary, participants that had neither parent born in the United States disagreed with this statement and described doctors as less intelligent than themselves. This supports the idea that, in the United States, there is a stereotype that doctors are extremely intelligent and are the pillars of society. The combination of these results may suggest there was a combination of pre-existing ideals, that could be collectively referred to as culture, that were beyond the scope of the instrument used in this study.

A major flaw in this study, in terms of researching the hypothesis specifically, was the instrument's inability to capture participants' races. In such a diverse society, where it is common for people to grow up with more than one culture, race is not easily defined. For example, one individual who selected Hispanic for race, answered the qualitative question about race (see Appendix 1) by stating, "[It's] funny since ethnicity is supposed to be culture based which I associate more with Japanese. However, biologically/race wise I would be classified as "Latino." Another individual who selected Native American and White for race, answered the qualitative question with specific percentages of 75% white and 25% Cherokee. Answers such as these highlight flaws within the instrument. If we are to assume culture affects level of medical mistrust, then asking only direct questions about race may not yield valid results. In addition, as demonstrated by the individual who specified being twenty-five percent Cherokee, perhaps there is a more dominant culture within a household. It cannot be assumed that because this individual is biologically more Caucasian that this culture had more influence on development. Likewise, it cannot be assumed that this person identifies with being a part of a minority.

Future research could benefit from shifting the focus away from biological race and more toward culture. While this survey did not yield significant findings about race and medical mistrust, there were many differences based on gender, age, social class, and citizenship status. As for the hypothesis, the initial question remains largely unanswered. Perhaps race/culture does influence medical mistrust, but future researchers would need to modify the instrument to make it a more effective measure of a person's ideals and cultural affiliations. Because the goal of this study was to research medical mistrust, which is a product of a set of beliefs about the medical profession, it seems important to examine what pre-existing ideals and norms participants have accumulated throughout their entire development prior to taking the survey.

More research is needed in this area because ultimately patient trust affects quality of care. Likely if a person reports feeling that doctors are motivated by money, are not very intelligent, or rush through appointments, they are not going to attend appointments frequently or feel comfortable discussing sensitive topics with doctors. Future research could reveal insights into the barriers that stand between doctors and patients and perhaps lead to better training among doctors to communicate with patients who come from different age, gender, social, and cultural groups. As of 2015, the MCAT (medical college admissions test) began including subjects such as psychology and sociology in addition to the pre-requisite science courses (biology, chemistry, and physics). This suggests a more holistic education of doctors in social science could lead to better care. As the population grows more diverse in the United States, different needs rise among patients and consequently new training must be provided for physicians.

In summary, this survey highlighted many important factors that weigh in on a person's decision-making process when it comes to medical decisions. Differences among participants from a range of ages, social classes, and citizenship statuses suggest that collectively these differences might belong to a set of beliefs, or a culture. While the relationship between race and culture and the relationship between race and medical mistrust was not captured in this study, the area remains an important field of study for future researchers and medical professionals.

### References

- Martin, S. (2012). Exploring Discrimination in American Health Care System: Perceptions/Experiences of Older Iranian Immigrants. *Journal Of Cross-Cultural Gerontology, 27*(3), 291-304.
- Mirror, Mirror on the Wall, 2014 Update: How the U.S. Health Care System Compares Internationally. (n.d.). Retrieved October 22, 2015, from <http://www.commonwealthfund.org/publications/fund-reports/2014/jun/mirror-mirror>
- Periyakoil, V. S., Neri, E., & Kraemer, H. (2015). No Easy Talk: A Mixed Methods Study of Doctor Reported Barriers to Conducting Effective End-of-Life Conversations with Diverse Patients. *PLoS ONE, 10*(4), e0122321. <http://doi.org/10.1371/journal.pone.0122321>
- Perry, R., Chien, A., Walker, W., Fisher, T., & Johnson, W. (2015). African American Adolescent Males' Views on Doctors and the Health Care System." *Journal of the National Medical Association 102.4* (2010): 312-20. *ProQuest*. Web. 22 Oct. 2015.
- Roman, J., Griswold, K., Smith, S., & Servoss, T. (2008). How patients view primary care: differences by minority status after psychiatric emergency. *Journal Of Cultural Diversity, 15*(2), 56-60 5p.

Scharff, D., Mathews, K., Jackson, P., Hoffsuemmer, J, Emeobong, M., & Edwards, D. (2010).

More than Tuskegee: understanding mistrust about research participation. *Journal of Health Care for the Poor and Underserved*, 21, 879-897.

Smith, K. M., Chesin, M. S., & Jeglic, E. L. (2014). Minority College Student Mental Health:

Does Majority Status Matter? Implications for College Counseling Services. *Journal Of Multicultural Counseling & Development*,42(2), 77-92. doi:10.1002/j.2161-

1912.2014.00046.x

**Appendix**

Major: \_\_\_\_\_

Year of birth: \_\_\_\_\_

Country of birth: \_\_\_\_\_

Gender: Male Female Other

What is your age?

Under 18

18-14

25-30

30+

List country of birth and education level of parent(s):

(e.g. United States) <b>COUNTRY OF BIRTH</b>	(e.g. bachelors degree) <b>HIGHEST EDUCATION RECEIVED</b>	(e.g. psychology) <b>DISCIPLINE</b>
1 _____	_____	_____
2 _____	_____	_____

As which race(s) do you identify? Circle all that apply.

Hispanic/Latino

American Indian

Black or African American

White

Asian/Pacific Islander

Asian

Hawaiian/Pacific Islander

Other (Please list: \_\_\_\_\_)

How do you describe your ethnicity to others?

\_\_\_\_\_

Which socio-economic class best describes your household?

\$0 - \$25,000

\$26,000 - \$50,000

\$51,000 - \$75,000

\$76,000 - \$100,000

> \$100,000

Please rate the following statements from 1-7. 1 indicates you strongly agree with the statement and 7 indicates you strongly disagree with the statement.

- |  | STRONGLY AGREE |   |   | STRONGLY DISAGREE |   |   |   |
|--|----------------|---|---|-------------------|---|---|---|
|  | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 1. During a visit with a doctor, I feel I can tell him/her anything.                         | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 2. I feel a high amount of anxiety when going to see a doctor.                               | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 3. I feel most doctors have their patients' best interests in mind.                          | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 4. I feel most doctors are qualified to treat my illnesses.                                  | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 5. I trust nurses and doctors equally.   | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 6. Language has been a barrier when speaking with a doctor.                                  | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 7. I always understand the information the doctor presents to me.                            | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 8. During a visit with a doctor, I feel have a choice to decline treatment.                  | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 9. I often want a second opinion for a suggested treatment.                                  | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 10. I generally view the doctor's office/clinic as a positive environment.                   | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 12. I can distinguish the different types of medical professionals who provide primary care. | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 13. I understand what tests will be performed when my blood is drawn.                        | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 14. I am confident that the blood will only be used only for my benefit.                     | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 15. I would be willing to participate in medical research.                                   | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 16. I feel that medical research is beneficial.  | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 17. I often withhold information from doctors to avoid judgment.                             | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 18. I have had a negative experience with a doctor in the past.                              | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 19. One or more of my parents has had a negative experience with a doctor in the past.       | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 20. I feel that doctors are much more intelligent than I.                                    | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |
| 21. I feel doctors are primarily motivated by money.   | 1              | 2 | 3 | 4                 | 5 | 6 | 7 |

22. I am confident that information I tell a doctor will not be repeated to anyone else. 1 2 3 4 5 6 7
23. I believe my body can heal itself and that going to see a doctor is not necessary. 1 2 3 4 5 6 7
24. I believe certain disorders are over-treated by doctors as a way to make money. 1 2 3 4 5 6 7
25. I believe doctors are everyday people that work hard and are good at what they do. 1 2 3 4 5 6 7
26. Before choosing a doctor, I research his/her past successes/failures. 1 2 3 4 5 6 7
27. I believe the health care system is fair. 1 2 3 4 5 6 7
28. I feel doctors talk down to me when explaining medical information. 1 2 3 4 5 6 7
29. I believe doctors genuinely care about their patients. 1 2 3 4 5 6 7
30. I feel doctors often rush through appointments. 1 2 3 4 5 6 7
31. I believe it is important that people have an annual physical exam. 1 2 3 4 5 6 7