

The Effect of Age on White Females' Trust in Medical Care In the United States of America

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Abstract

This article provides some new insights into medical care industry in a highly industrialized country such as the United States of America. The study underscores the effect of variation in age of individual white females on trust in medical care in the USA, and examines what significant factor(s) influence the trust of an individual towards medical care physicians provide to white female patients. How age and trust were related was studied 'within differences' rather than 'across differences'. A LISREL programme was used to estimate a Structural Equation Multiple Indicator Multiple Independent Cause (MIMIC) model. The article uses the United States of America General Social Survey data on white female. While the model predicted that occupational prestige score, income, education, and age were all statistically significant, age variable had a stronger factor loading coefficient indicating that trust about medical care from physicians increase as white female respondents get older. The findings indicate that overly simplistic categorization of racial binaries in explaining trust in medical care may inaccurately portray the relationship between a particular racial category and trust in medical care because differences within a racial category exist. Dissecting a racial group will broaden our understanding of trust and race relationship that will enable identifying effective strategies to eliminate inequities in healthcare.

Key words: Trust, age, structural equation, prestige score, income, education, factor loading, white, female, physicians, medical care.

1.0 Introduction

Individuals' trust towards physicians they consult in the United States of America has been declining in recent decades (Ahern and Hendryx, 2003). Trust is an essentially paramount aspect of individuals and physicians relationship(s) (Boulware *et al.*, 2003; Thom *et al.*, 2004). Space and race influence modern health discourse on access and individuals' satisfaction attached to access but also derived trust white female have of physicians they consult in the United States of America. But space alone is inadequate in understanding the preceding trust in the health discourse. When we factor in race and gender, the white female race animates as privileged, unlike their African-American counterparts (Fiscella *et al.*, 2002; Saha *et al.*, 2003; Weech-Maldonado *et al.*, 2003; Halbert *et al.*, 2006; Blendon *et al.*, 2007). This however, shadows knowledge about the female gender particularity of individual constructs of trust about medical care. While other studies focus on

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The Effect of Age on White Females' Trust in Medical Care in the USA

racial differences and access to health care (Watson, 2001; Ryn, 2002; Ashton *et al.*, 2003; Perloff *et al.*, 2006; Blendon *et al.*, 2007), little work has been done to investigate variation of access to health care and individuals' trust of physicians they consult within a white female racial category.

The study of which this article is a result unpacks the seemingly paradoxical notion of flagging white female Americans as a homogeneous entity, by addressing the dissimilarities within the white female cluster. In this article, we focus on adult (age 18-89) white females' responses on trust in medical care in the United States of America from a 1998 General Social Survey. The study analyses respondents' responses to seven dependent variables about medical care they have received from physicians practicing in the US. These included whether:

- (a) the doctor they consulted was not able to tell the respondent all the options available about treatment;
- (b) the doctor denied the respondent the treatment needed;
- (c) whether the respondent thought doctors put cost consideration above care;
- (d) the respondent could trust doctor's judgment;
- (e) respondents felt the doctor they consulted put medical needs above all other considerations when treating their medical problem;
- (f) respondents thought the doctor they consulted was an expert in taking care of the medical problem they had; or
- (g) respondents thought that the doctor told them when a mistake was made about the treatment they received for their medical ailment.

In addition, independent variables were highest level of education of individuals, their occupational prestige score, their income levels, respondents' confidence (feeling of assurance) in medicine, confidence in the scientific community as a whole, their general happiness (overall satisfaction), and the respondents' condition of health. The article seeks to answer the question what factor(s) affect white females' attitude or trust (firm reliance on the ability of the health care provider) towards medical care.

2.0 Method

2.1 Research Setting and Sample

The sample was comprised of 1,350 adult white female respondents (age 18-89) under the assumption that these had access to medical care. The study used archival data from the General Social Survey Data of the United States Census Bureau. It addressed the General Social Survey respondents' attitudes toward medical care in the United States of America. The study analysed respondents' responses to the seven variables described in the introduction section, about medical care they receive from physicians practicing in the U.S.A.

2.2 Measurement and Data Analysis

The article analyses the 1998 General Social Survey (GSS) of the United States of America using a Structural Equation Multiple Indicator Multiple Independent Cause (MIMIC) model. We report results for the factor analytic and path models. The article used SPSS to re-code variables, re-order categories from low to high, create dummy variables, and change all missing values to a common code (e.g., -999). The results of the coding process in SPSS were saved as a text file. We used PRELIS to read the text file and generate a matrix of covariances among all variables. Finally, we used LISREL8.72 to read the PRELIS generated covariance matrix as input for the analyses using the MIMIC model.

3.0 Results and Discussion

In Table 1, we present the Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI) of the model. The GFI and AGFI show the discrepancy between the observed data and the model's prediction. The goal is to use the model that has minimal discrepancy between the model and the data. In addition, the table shows the Root Mean Square Error of Approximation (RMSEA), which assesses the misfit of the model and the data for each degree of freedom (df), and the Chi-square value is included.

Table 1: Goodness of Fit statistics

Chi-square	RMSEA	GFI	AGFI
10.14	0.014	1.00	0.99

Table 1 shows that the Chi-square is 10.14 for 8 degree of freedom which indicates that it is a very good fit; a GFI=1.00 and AGFI=0.99 suggest a very good fit; and RMSEA=0.014 indicates a very good fit. Generally, the goodness of fit statistics indicates a close fit between the model used and the data.

Figure 1 shows the output of the MIMIC model. We use a three-star system to indicate the levels of significance. Significant factor loadings in the model are indicated with a star. The model indicates that the factor loadings (0.19, 0.09 and 0.07) for the latent medcare1 construct are all statistically significant at $P < 0.05$ with exception of prestg80 which is not statistically significant at $P < 0.001$ (factor loading, 0.00). Likewise, the factor loadings have different magnitudes; these magnitudes indicate the strength of the relationship between a factor loading and the latent medcare1 construct. In addition, the negative covariance between indicators shows inverse relationship between indicator's responses and the indicator it relates while a positive covariance indicates a positive relationship (when an additional unit change in an indicator increases the likelihood of the other indicator it connects to affect medical care). In the inverse relationship, each

A study on opinions of white people on occupation in 1944 indicated that 55% of white people suggested they should have the highest priority to any kind of job (Williams and Rucker, 2000). It is evident that whites were privileged to secure better jobs than other races prior to 1944. Over two decades passed before attitudinal changes in access to occupation started taking a different spin. In a similar study conducted in 1972, the view of prioritizing occupations based on race declined to 3%, a 52% difference between 1944 and 1972, which means 97% of white people indicated that black and white people should have equal chances of being employed (Williams and Rucker, 2000). This attitude change of white Americans, while a huge step in the right direction, does not necessarily suggest a rapid societal institutional change to reflect the attitude of equality between white and black persons in occupation as the majority of white persons indicated in 1972. This is not to suggest that there have not been changes at all in ensuring racial equity in occupation. It is only that in practice, fewer policies actually implement equal access to jobs (Schuman *et al.*, 1999; Thomas, 2001). The racial inequity in access to jobs is compounded by the fact that systemic racial differences in medical care results from both individual's conscious and unconscious discriminative behaviour and existing institutional policies that embed conscious negative stereotypes on particular races (Schuman *et al.*, 1999). Therefore, there is still a need for a deliberate and effective move to eliminate racial disparities in occupation in the US (Thomas, 2001).

Age has the strongest factor loading on medcare1. Figure 1 shows that the best path coefficient is from age (0.19). This implies that as age increases or as white female respondents get older, the degree of trusting about medical care is predicted to increase. This is because physicians' perception of older white female is positively inclined unlike other races, so physicians provide better services when consulted by white older females unlike their race counterparts (van Ryn and Burke, 2000). The preceding observation echoes the fact that better physicians' services affect patients' trust in medical care. In fact, physicians' caring and comfort are crucial as their technical competence in predicting patients' trust (Thom, 2001). In addition, the increase in trust may be a result of the time an individual spends with the physician (Kevin, *et al.*, 2004). However, other factors such as a physician wearing a professional dress (white coat with more formal attire) while providing care to patients influence trust and confidence building in a patient-physician relationship (Rehman *et al.*, 2005).

A statistically significant factor loading for education (0.09) on medical care indicates that an individual's education relates with her trust of physicians. Education equates with power, education makes an individual knowledgeable of the situation she is in, and instils in her a sense of identity position in the patient-physician relational spectrum when she consults a physician. An educated person

The Effect of Age on White Females' Trust in Medical Care in the USA

has the ability to study about her illness and identify her options before she consults a physician. When an educated white female consults a physician, there is a sense of power sharing that is based on educational status of both the patient and the physician (Krupat *et al.*, 2001). The sense of power sharing in turn may strengthen trust in the patient-physician relationship. Generally, one may argue that education, occupation and income while reinforcing one another may also be shaping not only how white old females view themselves, but also how physicians view them when they seek medical care.

4.0 Conclusion

This study highlights the complexity of medical care provision and satisfaction for white females in the United States of America. The race issue in medical care is complex, so future research should continue to focus on within differences (for example white female of a particular profession versus a contrasting profession) in a specific geo-space. This will enable a discovery on how the age and race factors relate to satisfaction of medical care provision by physicians. In this article we have specifically found that older white females increase the possibility of trusting medical care. Based on these findings researchers need to revisit our understanding of the medical care industry in industrialized countries such as the USA because although white females seem privileged in medical care there are specific variables that affect trust on medical care. This finding challenges how we perceive race-gender studies in medical care provision in the USA.

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C.M.P. William

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