

Importance of Research, Prestige, and Altruism in Medical-school Applicant's Decisions to Study Medicine: Differences by Gender and Race/Ethnicity

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Purpose: This study examined potential differences by gender and race/ethnicity in medical-school applicants' attitudes about the importance of several factors in their decisions to study medicine.

Methods: We obtained de-identified data from the Association of American Medical Colleges (AAMC) for a national cohort of respondents to the 2001-2006 Pre-Medical College Admission Test Questionnaire (PMQ). With principal component analysis, three multi-item attitudinal factors emerged with adequate reliability: research, prestige, and altruism. Using analyses of covariance, we tested each factor for differences by gender and race/ethnicity (White, Asian/Pacific Islanders, and underrepresented minorities [URM], including Black, Hispanic, and Native American/Alaskan), controlling for age, parental education, high school summer laboratory research apprenticeship and classroom-based summer, after school, or Saturday research programs, college laboratory research apprenticeship, and area of medicine applicants found most interesting.

Results: Of all 262,815 PMQ respondents, 213,788 had complete data for analysis. In the model testing the importance of research in applicants' decisions to study medicine, the interaction between gender and race/ethnicity was significant ($F=3.19, p=0.041$). Among White and URM, applicants, men assigned greater importance to research than women (F White=10.25, $p=0.001$; F URM=5.60, $p=0.018$). In the model testing the importance of prestige, the interaction also was significant ($F=13.81, p<0.001$). Across all the racial/ethnic groups, men assigned greater importance to prestige than women (F White=855.15, $p<0.001$; F URM=153.50, $p<0.001$; F Asian=141.41, $p<0.001$). Finally, in the model testing altruism, the interaction between gender and race/ethnicity was significant ($F=7.89, p<0.001$). In this model, women assigned greater importance to helping others than men (F White=1143.88, $p<0.001$; F URM=183.69, $p<0.001$; F Asian=382.15, $p<0.001$).

Conclusion: We observed differences by gender and race/ethnicity in medical-school applicants' attitudes about the importance of research, prestige, and altruism in their decisions to study medicine. Further research about the effect that these attitudes have on applicants' career paths is warranted.