

Introduction

- The symbol of the white coat began as a way for trained physicians to differentiate themselves from others who did not practice evidence-based medicine. However, some doubt the white coat's ability to facilitate interpersonal relationships. Mayo Clinic "instructs its physicians to wear business attire only...to break down the barrier between physicians and patients."¹
- In a 2013 study at Ochsner Medical Center, patients were given images of physicians wearing four different articles of clothing: "traditional white coat, bare-below-the-elbow attire, white coat and scrubs, and scrubs alone."² Patients were asked to rank physicians' skills and competence based on their attire. 65% of the subjects rated the physician wearing the traditional white coat as most competent. 89% of the subjects said that they would be more comfortable with physicians wearing the traditional white coat.
- The aim of this study is to assess the perception of the white coat as a symbol of the medical profession at UMKC. We compared perceptions between subjects of different genders, races and levels of experience. We also analyzed perceptions in different clinical settings.

Methods

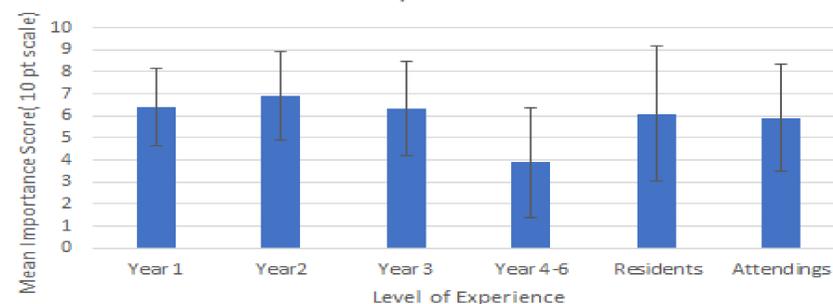
- A paper survey assessing perception and personal maintenance of the white coat was administered to 401 UMKC SOM students Years 1-6, UMKC Internal Medicine Residents and Truman Attendings. All the surveys were anonymous.
- Three questions asked about the subject's gender, race, and position. The University of Missouri-Kansas City School of Medicine has a 6-year BA/MD program. Years 1-2 medical students are considered preclinical, and Year 3 medical students have early continuity clinic experience. Years 4-6 participate in clinical rotations and continuity clinic experience.
- Two questions asked about the subject's perception of the white coat, including their perception in different clinical settings. This was evaluated on a 10 point scale.
- The data was analyzed using T-tests, ANOVA with LSD post-hoc, ANOVA with Tukey HSD post-hoc, repeated measures ANOVA, Wilks-Lambda with paired samples, and internal consistency reliability. Cronbach's Alpha was used to test for reliability.

Data and Analysis			
	N	Mean*	Standard Deviation
Gender			
Female	256	6.0716	2.31217
Male	138	5.6533	2.66488
Race			
White	154	5.3647	2.55107
Asian	204	6.4011	2.18467
URM**	34	6.3309	2.53066
Level of Experience			
Year 1	96	6.3784	1.75352
Year 2	79	6.9294	2.01276
Year 3	92	6.3505	2.13167
Year 4-6	78	3.8814	2.49699
Residents	37	6.1011	3.06069
Attending	18	5.9028	2.41493
Location			
Internal Medicine	6.840	0.136	
Psychiatry	5.416	0.152	
Pediatrics	4.987	0.149	
Emergency Medicine	6.016	0.154	

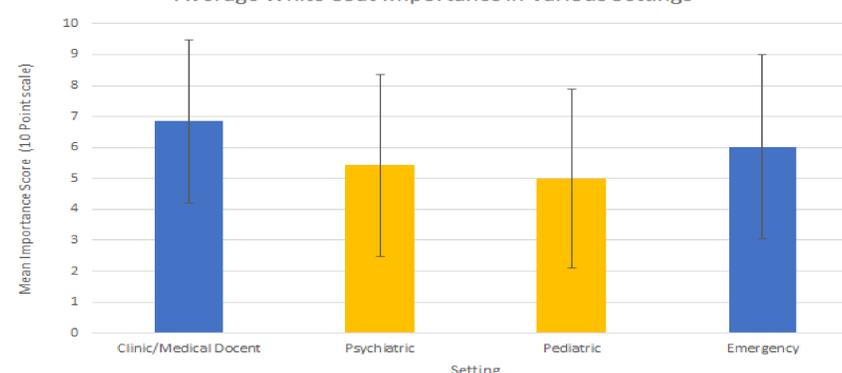
*The importance was measured on a 10 point scale.

**URM(Underrepresented minorities) refers to American Indian/Alaskan Native, Black/African American, Hispanic/Latino, Native Hawaiian or Other Pacific Islander

Average White Coat Importance Based on Level of Experience



Average White Coat Importance in Various Settings



Conclusion

- Males' and females' perceptions of the white coat was compared. The p-value was 0.106, meaning there is no significant difference between males' and females' perception of the white.
- Different races' (White, Asian, underrepresented minorities (URM)) perceptions of the white coat was compared. All values were statistically significant. Perceptions of the white coat by Asian individuals was different than that of White individuals (p<0.001) but not significantly different than those of URM (p=0.873). Perceptions of the white coat by White individuals was significantly different than those of URM (p=0.032).
- White coat perception was compared between subjects with different levels of experience. All values were statistically significant (p<0.001). When comparing between the different groups, all the groups statistically different from Years 4-6. Years 1,2, 3 medical students and residents had a p value <0.001 when compared to Years 4-6, and attendings had a p value of 0.007 when compared to Year 4-6.
- Subjects' perspectives on the necessity of white coats in four different clinical settings was compared. All comparisons were significant with a p-value < 0.001.

Limitations

- There was a bigger sample size among Years 1, 2, and 3 compared to Years 4-6, residents and attendings
- There was a disproportionate amount of White and Asian students and physicians compared to URM students and physicians.

Future Directions

- Investigators would, in the future, assess attitudes toward the white coat using a focus group of individuals from different genders, races, levels of experience.
- We would also further evaluate patient perception of the white coat in patient-physician interactions.

References

- Mahoney, S. (2018, July 31). The white coat: Symbol of professionalism or hierarchical elitism? Retrieved from <https://news.aamc.org/patient-care/article/white-coat-symbolism/>
- McLean, M., & Naidoo, S. S. (2007). Medical Students Views on the White Coat: A South African Perspective on Ethical Issues. *Ethics & Behavior*, 17(4), 387-402. doi:10.1080/10508420701519536