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Subjective Human Appearance Perception Evaluation (SHAPE)

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Author Note: Bonvie Fosam is an Engineering Management major at the United States Military Academy at West Point. She will graduate in May 2021 and commission as a Signal officer in the United States Army. Her initial assignment is to the 1st Signal Brigade at Camp Humphries, Korea. COL Matthew Dabkowski and MAJ Erin Williams serve as faculty advisors for this project. Special thanks to Dr. Diana Thomas, USMA Department of Math, and Dr. Tiffany Stewart of the Pennington Biomedical Research Center in Baton Rouge, Louisiana, for their support and assistance.

Abstract: Body image dissatisfaction is an issue that permeates the world and is associated with detrimental effects to include anxiety, depression, and low self-esteem. The United States Army values physical fitness and appearance in its ranks, which leaves Soldiers susceptible body image dissatisfaction and its effects. To gain a better understanding of the prevalence of body dissatisfaction in the Army, the research team surveyed cadets at the United States Military Academy at West Point. Cadets completed surveys to identify their personal current and ideal body image perceptions, and their perceptions of the typical and ideal male and female Army Officer using body morph assessment avatars. The research team measured the self-perception discrepancy, as well as the officer perception discrepancy, and looked for perception differences between different subpopulations. There was a statistically significant difference in self-perception discrepancy for male and female cadets, with male cadets preferring a larger body and female cadets preferring a smaller body. There were also statistically significantly differences in self-perception discrepancy between upperclassmen and underclassmen, and cadets ranked in the middle third of the class compared to those at the top and bottom third. In terms of officer perception discrepancy, class year played a significant role in the perceptions of male and female officers, and cadet race influenced the officer perception discrepancy of male officers. Linear regression was used to assess the relationship between cadet perceptions and performance on the Army Combat Fitness Test (ACFT), but ultimately found no significant relationship between these variables. The results of this study can be used to recommend further research into the causes for body image dissatisfaction among cadets, and ultimately to make recommendations for the betterment of West Point cadets, and even soldiers in the United States Army.

Keywords: Body Image, Body Image Dissatisfaction, United States Military Academy

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