



The End of Average: How We Succeed in a World that Values Sameness

Todd Rose. New York, NY: HarperCollins, 2015.

Book Digest

Relevance: This book details how the idea of the “average” evolved and came to hold such sway in industrialized nations. Rose suggests that “averagerian thinking” – or the uncritical embracing of averages as accurate measures of reality – impedes individual and organizational success in different realms, such education and business. In the Marine Corps, where standards are simultaneously valuable and problematic, a critical look at standards, where they come from, and what they are doing might offer new paths to efficiency and enhance problem-solving and creativity.

Discussion: Todd Rose, Director of the Mind, Brain, and Education Program at Harvard University’s Graduate School of Education, contends that a fixation on averages and standards has created a society in which alternative pathways of development, learning, creativity, etc. are overlooked or even pathologized. Rose traces the evolution of the idea of the average from Sir Francis Galton’s typology of human intelligence to the Taylorism of a rapidly industrializing United States to standardized tests and the outsized importance they play in the educational system and personal ideas of intelligence and worthiness. He begins the book by offering a case study situated in the military. In the mid-twentieth century, the Air Force was perplexed as to why so many skilled and qualified pilots were crashing their planes. Numerous investigations proved that pilot error and faulty mechanics were not the problem. The problem, it turned out, was that the standard cockpit was built for *no one* because it was created using the statistical average of hundreds of men’s bodies. As Rose reveals, the average is a powerful trope that is supposed to represent everyone but, in actuality, represents no one. While some might have a shoe size, for example, that falls into the statistical range of average, it is highly unlikely that every dimension of measurement is also average for that person. In the case of the plane crashes, structural mismatches between pilots’ bodies and cockpits proved to be fatal. Luckily, a lieutenant with a background in physical anthropology was able to demonstrate to the Air Force that the average airman did not exist. The Air Force began developing its cockpits with adjustable equipment, taking into to account the variability of pilot size, which the average concealed.

Like most organizations, the Marine Corps uses standards to assess individual performance and organizational efficiency. These standards, such as the fitness tests, are highly valued, as they factor into cutting scores and promotions. However, as much as standards elucidate, they also conceal. In the Translational Research Group’s exploratory research on gender, cohesion, and leadership conducted in 2017, Marines expressed frustration with the fact that so much weight is put on physical standards when so many other intangible and unmeasurable characteristics, such as people skills, factor into being a good Marine, being a good leader, and being good at your job. Additionally, some Marines talked about how the standard uniforms and equipment that are used by all Marines can sometimes cause functional issues for those whose bodies do not fit the standard. For example, for very short Marines, male and female alike, pack frames are too long and impede movement on hikes, causing Marines to be viewed negatively for not being able to keep up.

Rose suggests that an alternative to averages is the “science of the individual.” A tenet of this school of thought is that data should first be analyzed and then aggregated, as opposed to the typical aggregate-then-analyze method used in most statistics. Analyzing first helps to sustain some of the fidelity of the variability that exists within any given data sample. He also suggests that intelligence and aptitude profiles be seen as “jagged.” That is, while someone might be good at public speaking, they might excel at writing and be terrible at interpersonal communication. This jagged profile takes into account more than one factor of communication and can better fit people into jobs. One hurdle the Marine Corps might face in embracing this type of thinking is that many Marines’ idea of equality seems to be rooted in “the same, for everyone.” Recognizing “same” as a standard that obscures variability and impairs performance is a step in the right direction.

Review Author: Rebecca Lane, Davis Defense Group

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For more information, contact
Dr. Kerry Foshier, Director of Research
703-432-1504 / kerry.foshier@usmcu.edu