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How a Runner's Velocity and Acceleration Affected by Types of Shoes TYLER DAVIS, MICHAEL MIRANDA, KIM FARAH, Lasell College, DIPTI SHARMA, WIT — The problem that was studied for this undergraduate project was "Do different types of footwear have an effect on the overall velocity and acceleration generated by someone sprinting?" [1] The independent, dependent and control variables were considered as the types of footwear, time to cover a certain distance, and the distance required to sprint and the environment. A set distance (21.3m) was used for each trial. Velocity and acceleration were calculated using logger pro. The collected data were analyzed by logger pro and found significant differences in the types of shoes.

[1] D. Sharma and K. Farah, "Introducing the "RPPTM" Model of Teaching Physics to Health Science Majors," Bulletin of the American Physical Society, s2014, 59 (4) B1.00005)

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